MEGAPIXEL OUTDOOR IR NETWORK CAMERA SERIES

USER MANUAL

Please read instructions thoroughly before operation and retain it for future reference.

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We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

http://download.dvrtw.com.tw/GPL/076D_Series/arm-linux-2.6.tar.gz

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1. OVERVIEW

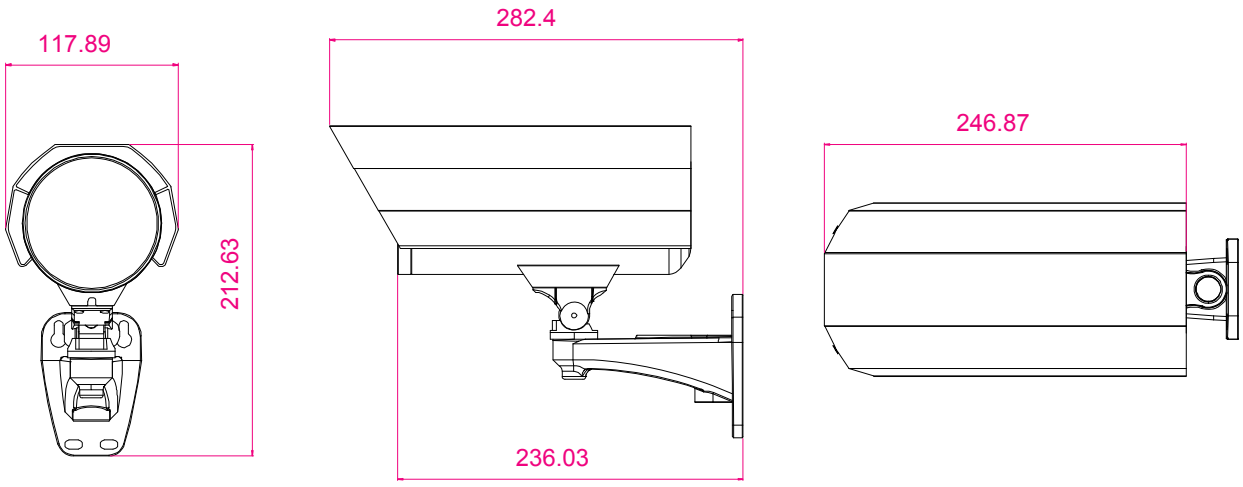
1.1 Product features

- Free CMS software with E-Map for multiple devices control & surveillance
- Smart Light Control to avoid overexposure
- Motion detection & notification
- Excellent outdoor design with cable management and IP67
- Face Tracking support to zoom in on intruders with clear images
- 1.3 Megapixel for clear and accurate images
- Digital pan / tilt / zoom support for wide area monitoring

1.2 Package content

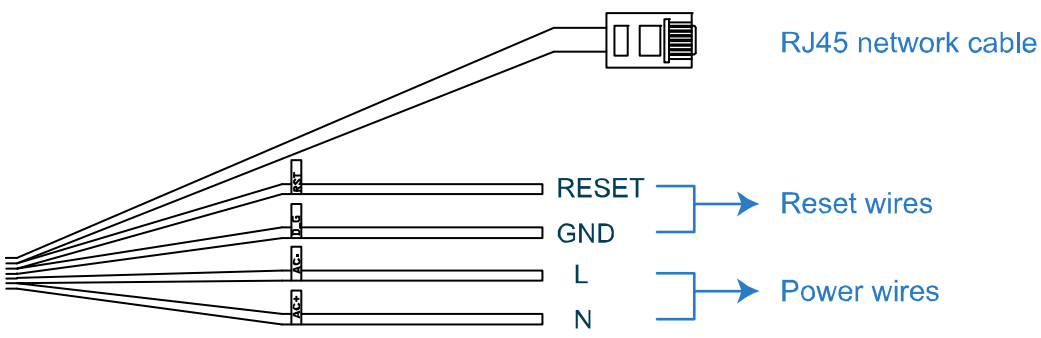
☐ Network camera	☐ Installation Sticker
☐ Installation Guide	☐ RJ45 cable extender adapter
☐ CD-ROM disc (including user manuals & CMS software “Video Viewer”)	

1.3 Dimensions



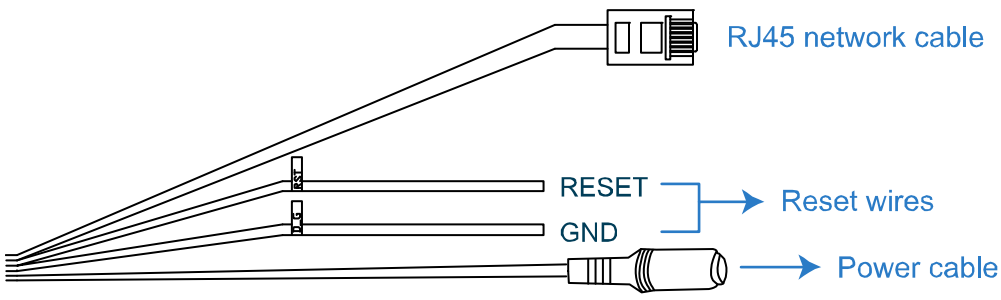
1.4 Cable overview

■ **For AVN363**



CABLE	DESCRIPTION
RJ45 network cable	Connect it to the supplied RJ45 cable extender adapter for cable extension, and prepare another RJ45 network cable with suitable length for your connection.
Reset wires	Remove the insulating coating of these two wires, and twist them together to reset default. This will reset all parameters, including the IP address to factory default settings. **Note:** Disconnect power before twisting these two wires together, and connect to power again for reset default. When the reset is done, disconnect these two wires.
Power wires	Connect to AC power supply. For details, please refer to the installation guide.

■ For AVN362



CABLE	DESCRIPTION
RJ45 network cable	Connect it to the supplied RJ45 cable extender adapter for cable extension, and prepare another RJ45 network cable with suitable length for your connection.
Reset wires	Remove the insulating coating of these two wires, and twist them together to reset default. This will reset all parameters, including the IP address to factory default settings. **Note:** Disconnect power before twisting these two wires together, and connect to power again for reset default.
Power cable	Connect to DC12V power supply.

2. BEFORE USING YOUR NETWORK CAMERA

This network camera can be accessed via our supplied CMS software “Video Viewer”, the web browser (such as “Microsoft Internet Explorer” or “Mozilla Firefox”), and smart phones with our self-developed program “EagleEyes” installed depending on different using situations.

Note: For details about accessing network cameras via smart phones, please refer to http://www.eagleeyescctv.com.

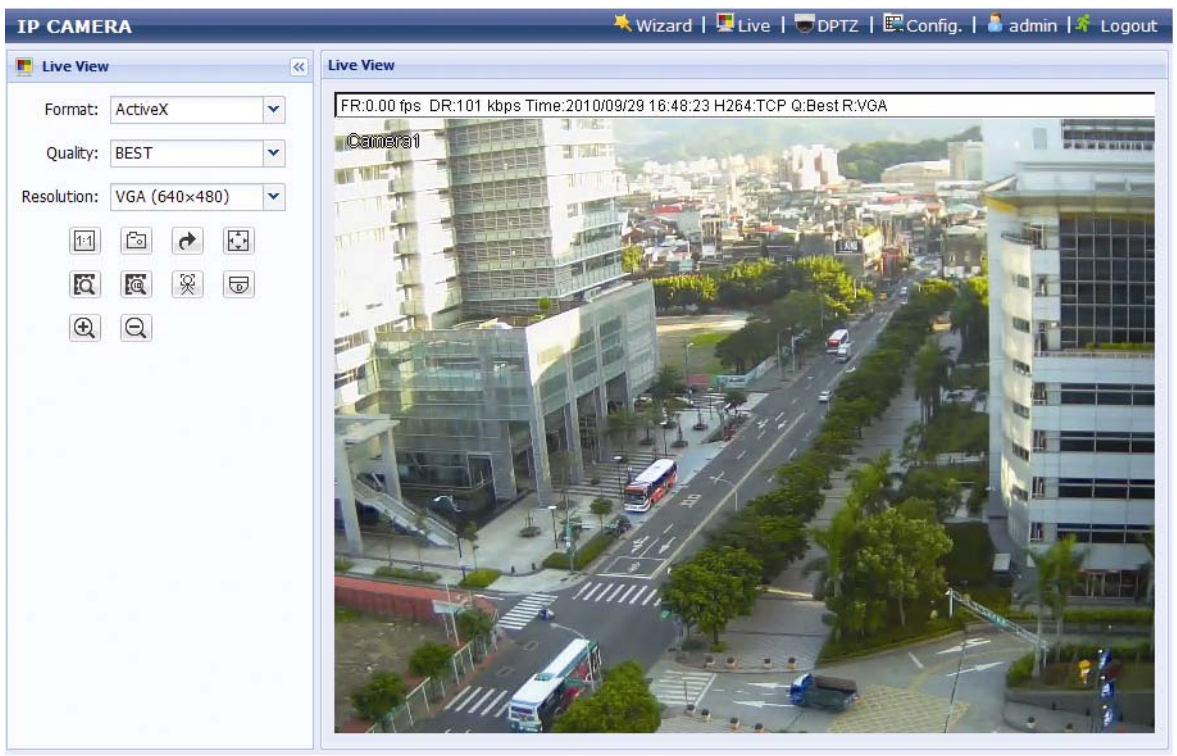
Before using the network camera, make sure:

1) You have installed the supplied CMS software, “Video Viewer”, or a web browser.
2) You have configured the network settings, and the network connection is fine.

For Video Viewer installation, please refer to “3.1 Installing Video Viewer” at page 4.
For network configurations, please refer to your installation guide.

- To check or configure up to 16 surveillance devices simultaneously with the record function, please use “Video Viewer”.
  For details about using Video Viewer, please refer to “3. ACCESSING THE CAMERA VIA VIDEO VIEWER” at page 4, and “4. CAMERA CONFIGURATION” at page 13.

- To check or configure this network camera only, it’s recommended to use the web browser “Microsoft Internet Explorer” or “Mozilla Firefox”.
  For details about using the web browser, please refer to “4. CAMERA CONFIGURATION” at page 13.

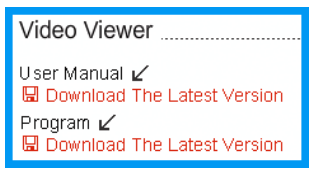


3. ACCESSING THE CAMERA VIA VIDEO VIEWER

3.1 Installing Video Viewer

Step1: Place the supplied CD into your CD-ROM or DVD-ROM drive. The program will be automatically run.

Step2: Click “Program” in the “Video Viewer” section to install Video Viewer, or click “Download The Latest Version” under “Program” to download the latest version of Video Viewer from the Internet (if your PC is connected to Internet).



Step3: Follow the on-screen instructions to finish the installation. When the installation is completed, a shortcut icon “ ” will be placed on your PC desktop.

3.2 Accessing the camera

Step1: Double-click “ ” on your PC desktop to open Video Viewer. By defaults, the “Address Book” panel will be displayed on the right side of the control panel.

Step2: In “Address Book”, click “ ” to key in the IP address, user name, password, and port number of the camera you intend to connect.

OR

Click “ ” → “ ” to search the available IP address(es) of other camera(s) under the same domain as your PC’s IP address. The found address(es) will be listed, and can be added into the address book by clicking “ ”.

Step3: Double-click the IP address you just added into the address book to log in. The live view is displayed in the Video Viewer.

3.3 Control panel overview

Two control panels are available and can be switched depending on your using habit.

3.3.1 Simplified version (Default)

3.3.2 Full function version

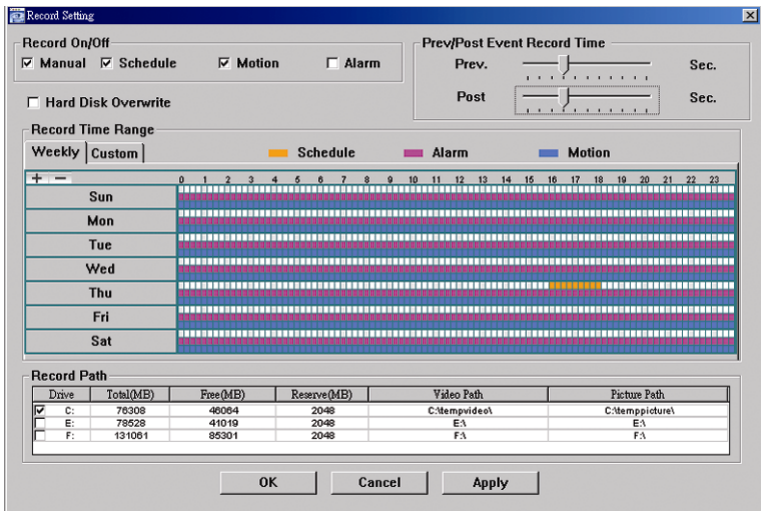
3.3.3 Main button overview

Button		Function	Description		
Simplified	Full Function				
		Address Book	Click to show the predefined IP address(es). You can add, remove or search the IP address to log in the DVR remotely.		
		Miscellaneous Control		Remote Config	Click to go to the detailed system configuration. For details, please refer to “4. CAMERA CONFIGURATION” at page 13.
				Record Setting	Click to go to the detailed record setting. For details, please refer to “3.4.1 Record” at page 7.
				Custom Setting	Click to choose the language of this program, or set the password when activating this program. The changes will take effect when this program is closed and executed again.
		Log	Click to view all event and recording logs, search the desired log(s) by date, or playback the recording of the selected log.		
		Record / Record Stop	Click to start / stop the manual recording. The record button will be disabled when the reserved disk capacity set in “Record Setting” is larger than the current disk capacity. For details, please refer to “3.4.1 Record” at page 7.		
		Snapshot	Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in “Record Setting”.		
		Information	Click to show the current network connection details.		
		PTZ Control	Click to enter the DPTZ control panel.		

3.4 Frequently-used functions

3.4.1 Record

To record remotely, click “ ” or “ ” → “ ” to go to the “Record Setting” page.



In the “Record Setting” page, you can set the following items:

- Record type
- Pre- / post-event record time (0~10 seconds)
- Record time setting
- Record path

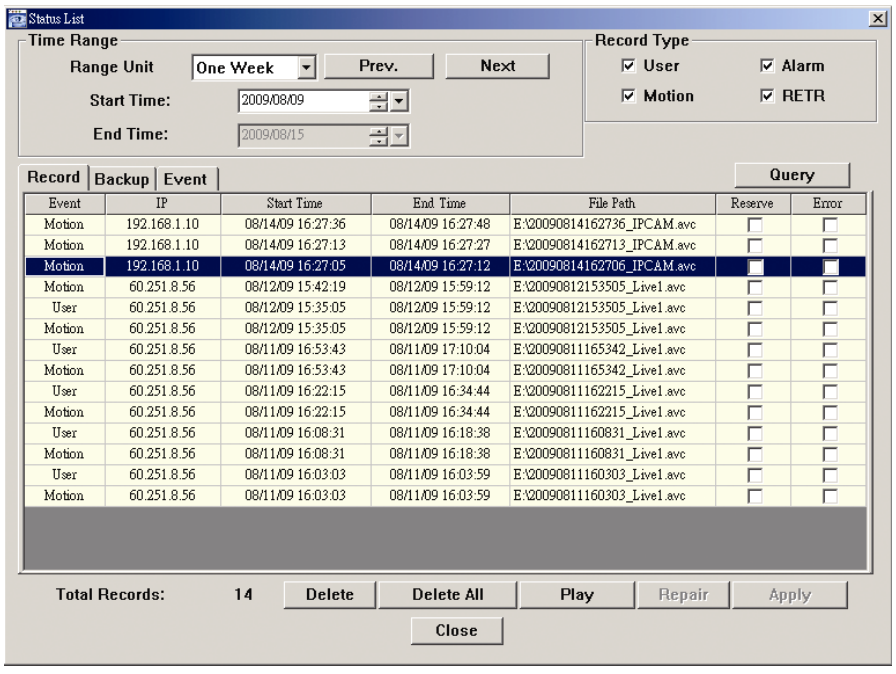
Note: The record function will be disabled when the reserved disk capacity in “Reserved(MB)” is larger than the current disk capacity in “Free(MB)”.

When “Manual” is checked, click “ ” or “ ” on the main control panel to start the manual recording immediately, and the recordings will be saved in the location specified in “Record Path”.

When “Motion” and / or “Alarm” are checked, the recording function will be enabled for any motion or alarm event, and the recordings will be saved in the location specified in “Record Path”.

3.4.2 Playback

To play a recording, click “ ” or “ ”, and select the “Record” tab. A list of all the recordings will be shown by defaults, and you can also sort out the logs you want to speed up the search time.



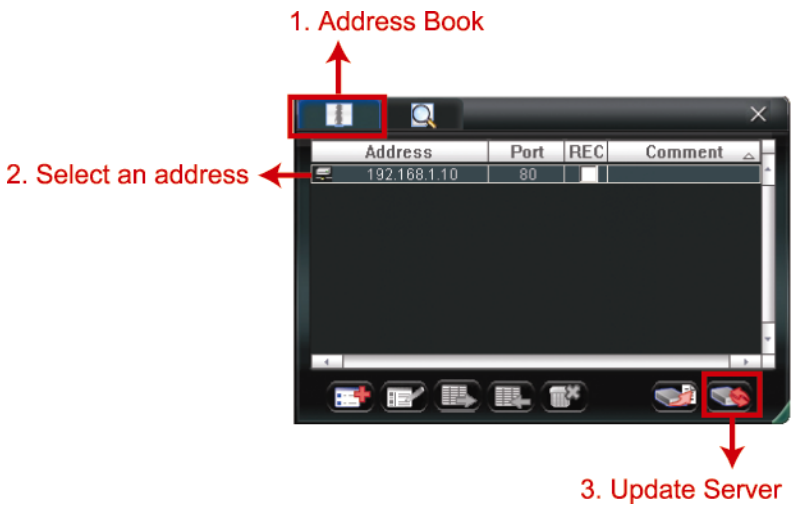
3.4.3 Firmware upgrade

This function is used when users need to upgrade the network camera for function scalability.

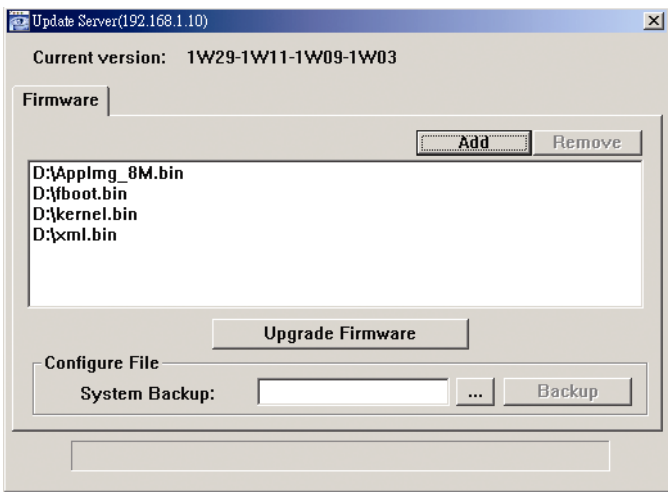
Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Step1: Click " ", and select the IP address of your network camera in the address book.

Step2: Click " " to show the upgrade page, "Update Server".



Step3: Click "Add" to browse to the upgrade files.



Step4: Click "Upgrade Firmware" to start firmware upgrade.

Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

Step5: Select the IP address of the camera and click " " again to check if the firmware is upgraded.

3.4.4 E-Map

Video Viewer is also a Central Management System (CMS) software, which allows network device control & management for up to 16 devices simultaneously.

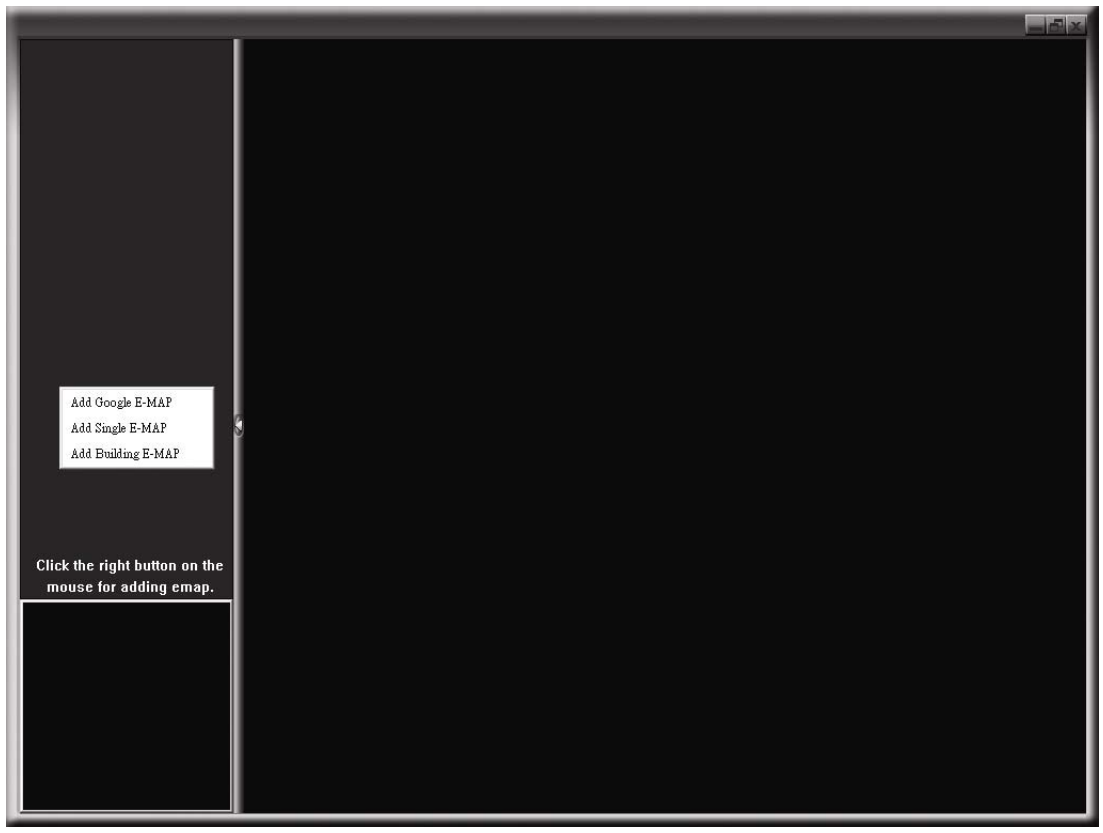
Note: Before using this function, make sure Video Viewer is connected to all the devices (up to 16) you want to monitor.

E-Map is **ONLY** available when the control panel is switch to the full function version.

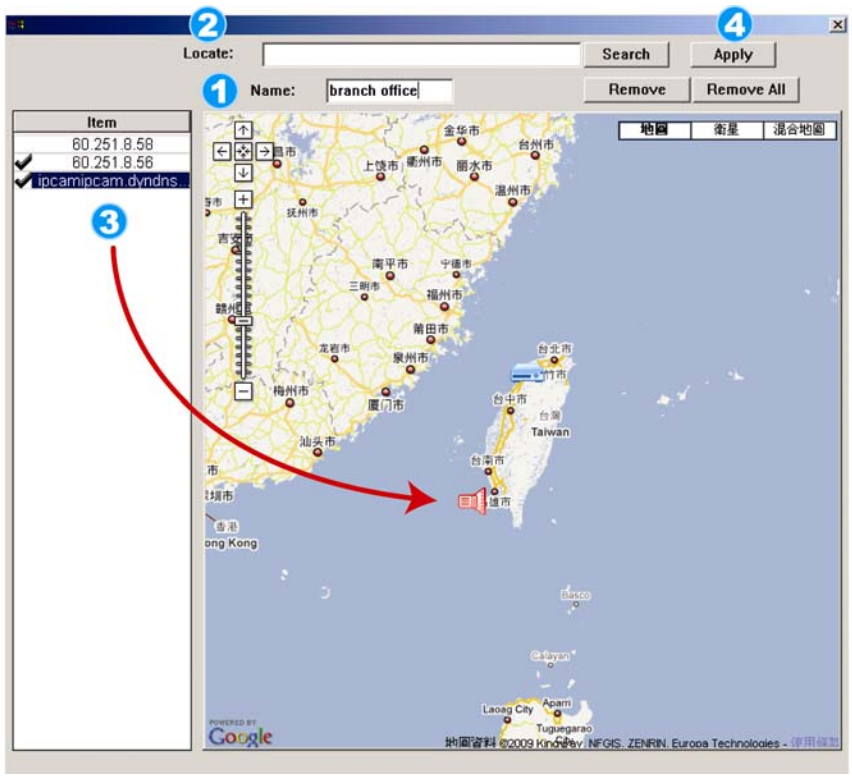
How to add an E-Map group

STEP1: In the simplified version, click " " to switch the control panel to the full function version, and click " " to enter the E-Map page as follows.

Note: To know where the buttons are, please refer to "3.3.1 Simplified version (Default) at page 5, and "3.3.2 Full function version" at page 6.

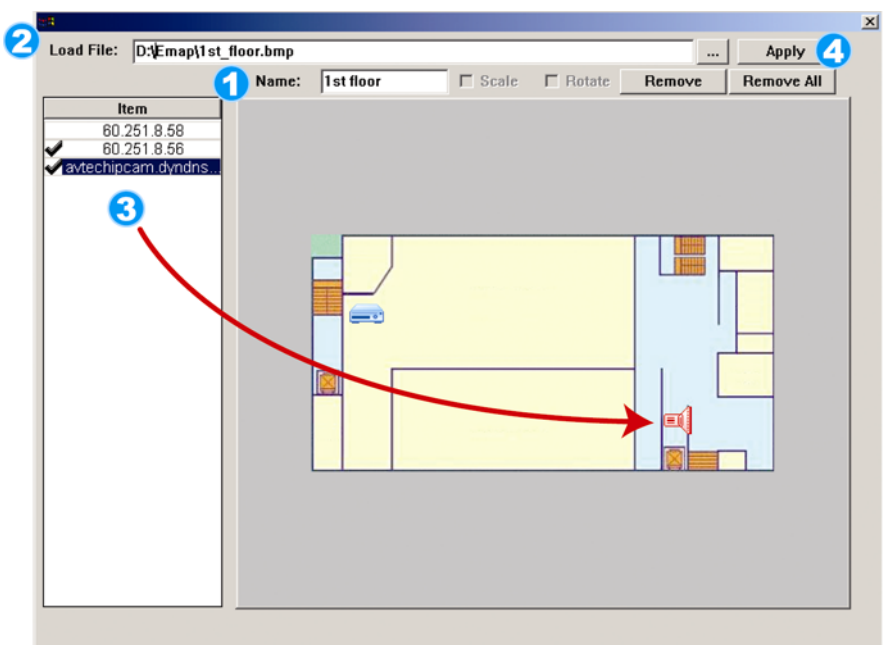


STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add. There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.



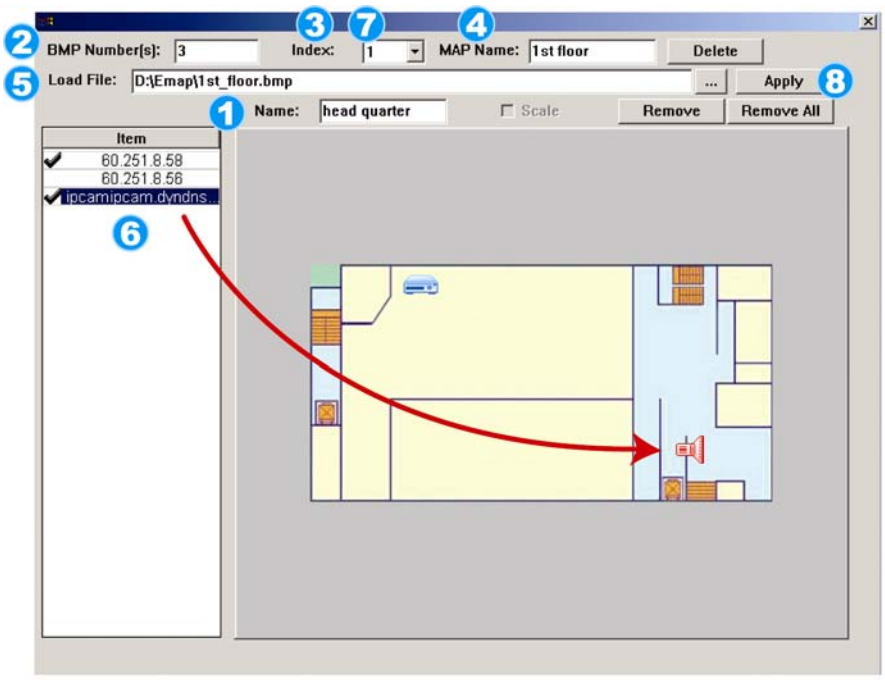
How to add a Google E-Map group:

1. Enter the name of this Google E-Map group.
2. Enter a specific address or landmark, and click “Search”.
   OR
   Move to the map and drag to the location you want.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.



How to add a single E-Map group:

1. Enter the name of this single E-Map group.
2. Click “...” to browse the map file in BMP or JPEG.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.



How to add a building E-Map group:

1. Enter the name of this building E-Map group.
2. Enter the total levels of this building.
3. Select the level of the building from the drop-down list.
4. Enter the name of the level.
5. Click "..." to browse the map file in BMP or JPEG.
6. Click and drag the IP address to where it's located in the current level.
7. Go back to STEP 3 to select other level of the building, and repeat from STEP 3 to 6 until the setup for all levels are finished.
8. Click "Apply" to save and finish.

STEP3: When the E-Map group is created, you will see the tree on the top-left panel, showing all the devices you've added to this group.

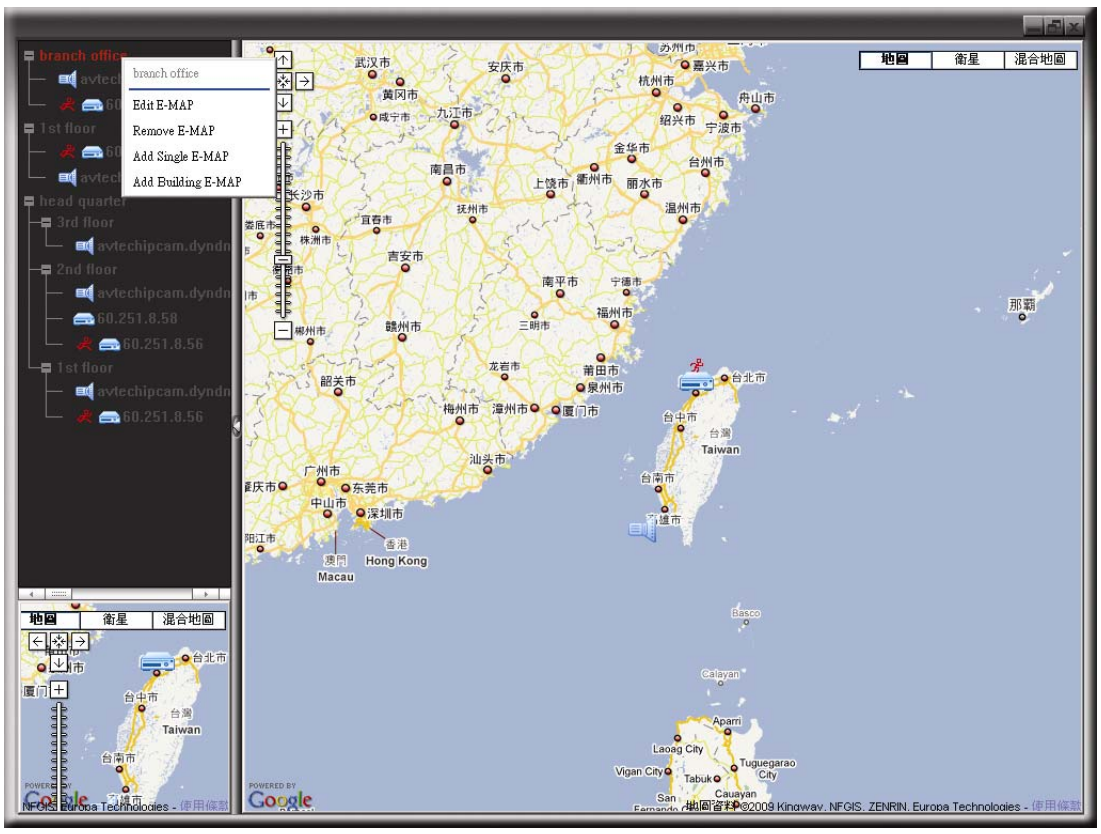
Icon	Description
	The connected device is camera. When it's selected, it will become red.
	The connected device is DVR. When it's selected, it will become red.
	For any motion or alarm event, it will appear on the screen to catch your attention. To know what's happening quickly, double-click the device icon on the E-Map to show the live view.

How to edit / remove an existing E-Map group

- For Google E-Map Group

  Right-click on the group name to show the shortcut menu list, and select “Edit E-MAP” or “Remove E-MAP” as needed.

  You can also add a single E-Map group (Add Single E-MAP) or Building E-Map group (Add Building E-MAP) into the existing Google E-Map group.

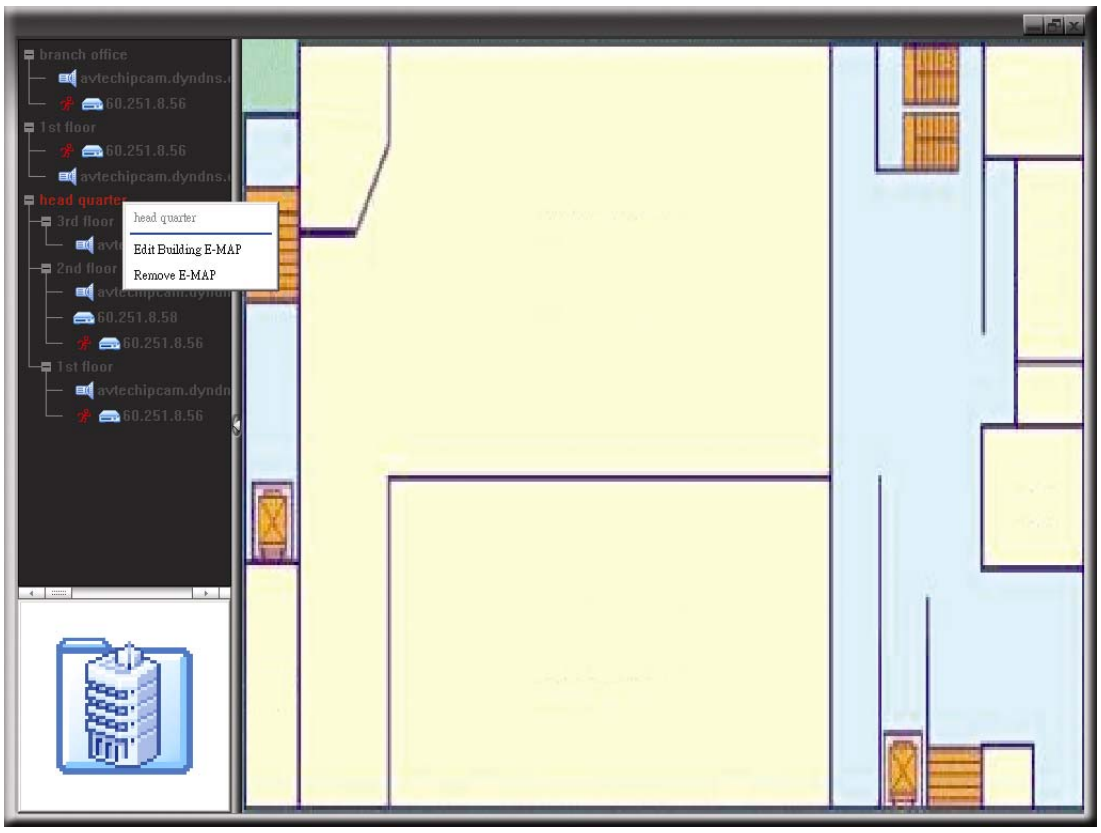


- For Single E-Map Group

  Right-click on the group name to show the shortcut menu list, and select “Edit E-MAP” or “Remove E-MAP” as needed.

➢ For Building E-Map Group

Right-click on the group name to show the shortcut menu list, and select “Edit Building E-MAP” or “Remove E-MAP” as needed.



4. CAMERA CONFIGURATIONS VIA WEB BROWSER

Users can also access the network camera via a web browser, such as Microsoft Internet Explorer, Mozilla Firefox, Google Chrome and Safari.

Note: It's recommended to consult with your installer before changing system configurations.

Note: You need to be the supervisor to enter the system configuration page. If not, please re-log into the camera with the supervisor user level.

However, the web browser is only available for single device access. If users want to access more than two devices through one interface, it's recommended to use our supplied CMS software, Video Viewer. For details, please refer to "3. ACCESSING THE CAMERA VIA VIDEO VIEWER" at page 4.

Before using the network camera, make sure you have configured the network settings and have the IP address, user name and password used for accessing the camera in hand. If not, please refer to the installation guide.

4.1 Accessing the camera

Step1: Open your web browser, and key in http://*ipaddress*:*portnum* in the URL address box.

For example, for IP address 60.121.46.236 and port No. 888, please key in "http://60.121.46.236:888" into the URL address box, and press "Enter".

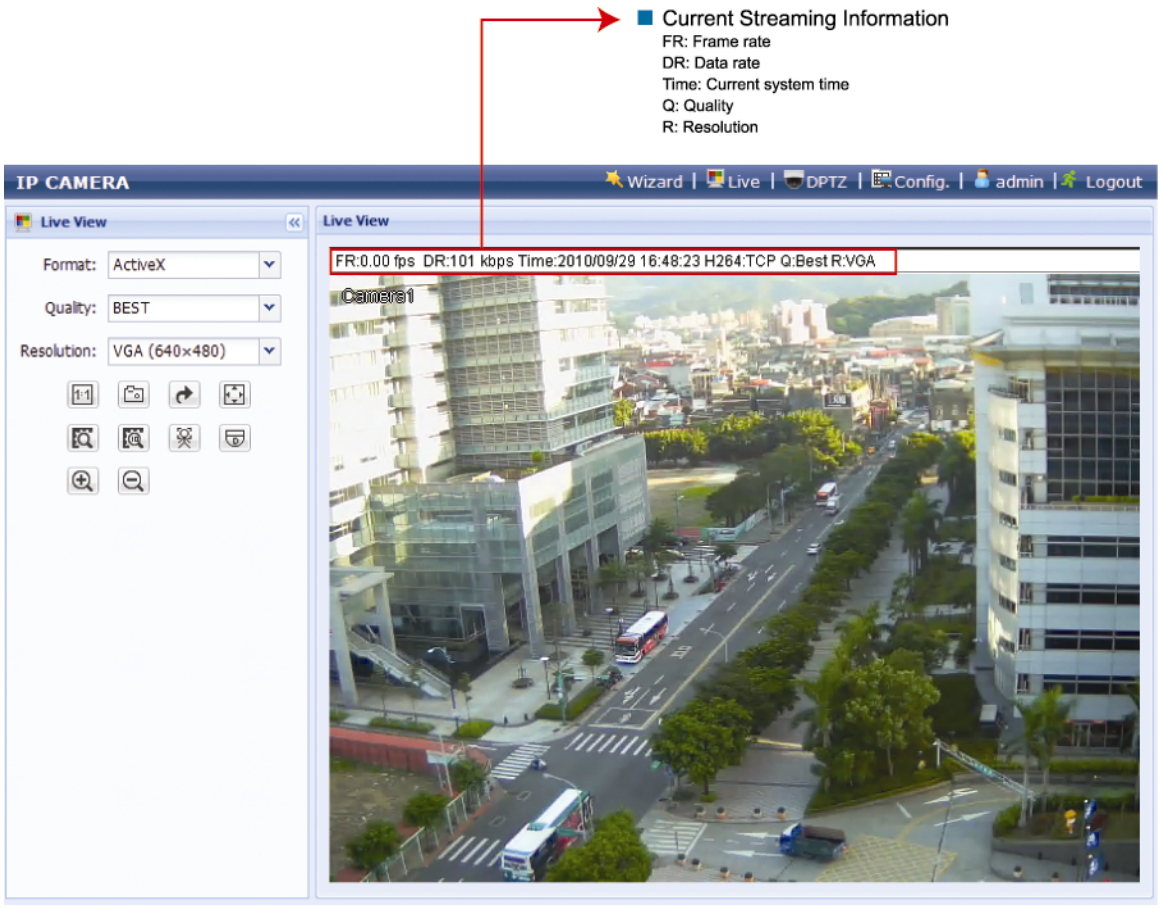
Step2: In the login page, key in the user name and password, and enter the security code from the image below if any. Then, click "LOGIN".

Step3: The wizard is then started.

- To skip the wizard and directly access the camera live view, click "Close".
- To directly access the camera live view without starting the wizard for the login next time, check "Do not start wizard at login".

Step4: When the login is successful, the live view is shown.

4.2 Control panel overview



Function	Icon	User Level	Description
Configuration Page:		Supervisor / Power User	
Live			Switch to the live view page.
DPTZ			Switch to the DPTZ configuration page. For details, please refer to “4.4 Digital PTZ (DPTZ) operations” at page 15.
Config.			Switch to the system configuration page, and the functions available for “Supervisor” and “Power User” are different. For details, please refer to “4.5 System configuration menu” at page 17.
Format	--	Supervisor / Power User / Normal User / Guest	Select the web transmission format from the drop-down list: ■ ActiveX ■ QuickTime For users using Mozilla Firefox or Google Chrome, only “QuickTime” is selectable. QuickTime is Apple Inc.’s multimedia software. You need to have QuickTime installed in your operating system before selecting “QuickTime”. When it is selected, you will be promoted to enter the user name and password to access the camera.
Quality	--	Supervisor / Power User / Normal	Click & drag the slider to select the video quality: BASIC / NORMAL / HIGH / BEST.
Resolution	--	Supervisor / Power User / Normal	Select the image resolution from the drop list: ■ SXGA (1280 x 1024) ■ SXVGA (1280 x 960) ■ 720P (1280 x 720) ■ VGA (640 x 480) ■ QVGA (320 x 240)
Live View Size:		Supervisor / Power User	
Normal Size			The current live view size is the same as the selected resolution.
Fit to screen			Resize the selected resolution to fit into the live view size. *This icon appears only when the selected resolution is larger than the current live view size.*
Scale			Click and hold the movable square on the left bottom corner of the live view to move *This icon appears only when the selected resolution is larger than the current live view size.*
CIF Resize			Resize the QVGA resolution to fit into the live view size. *This icon appears only when the selected resolution is QVGA (CIF) than the current live view size.*
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot of the current view, and save to the location specified in “Config.” → “Camera” → “Camera” → “Snapshot Path”.
Flip		Supervisor / Power User / Normal User	Click to rotate the image 180^0 counterclockwise when necessary.

Function	Icon	User Level	Description
Full Screen		Supervisor / Power User / Normal User	Click to display the image in full screen. To exit the full screen mode, press “Esc” on your keyboard.
Smart Zoom		Supervisor / Power User	Click to activate the optical (AVN363) / digital (AVN362) smart zoom function.
Smart Zoom 10		Supervisor / Power User	Touch to enable consecutive Smart Zoom for 10 minutes and disable the idle mode. Consecutive Smart Zoom will be off after 10 minutes, and auto Smart Zoom will be on instead.
Face Tracking		Supervisor / Power User	Click to enable the face tracking function.
DPTZ		Supervisor / Power User	Click to enable digital PTZ functions.
Zoom in / out	/	Supervisor / Power User / Normal User / Guest	Click to zoom in / out the current image.

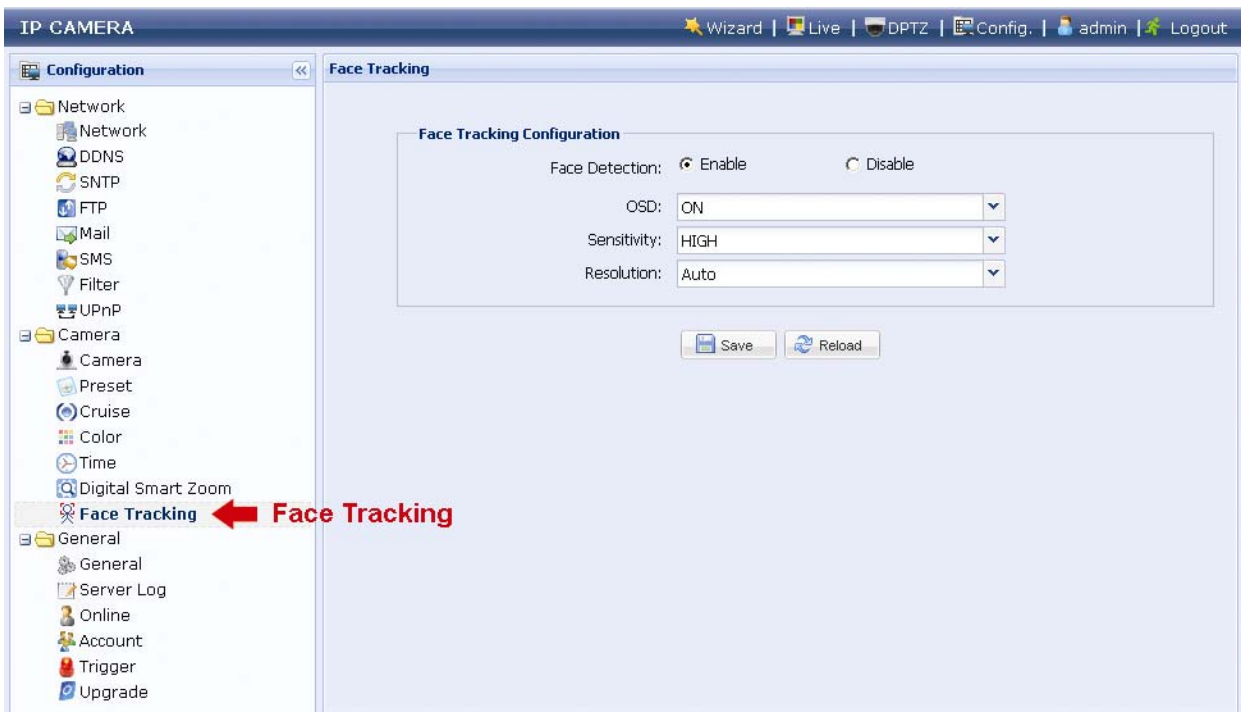
*** Face Detection, DPTZ & Smart Zoom can’t be activated simultaneously.*

4.3 Face detection configurations

Face detection is used to especially zoom in on the intruder’s face, easy for everyone to identify.

Note: This function is not available when the stream format is selected as MJPEG.

Note: When this function is enabled, DPTZ, Smart Zoom, and optical zoom are not allowed to use.



STEP1: Click “Config.” → “Camera” → “Face Tracking” to enter the configuration page.

STEP2: Select and set as described below:

ITEM	DESCRIPTION
Face Detection	Select “Enable” to activate or “Disable” to deactivate this function.
OSD	Select “ON” to display the following status messages on the live view: FACE STANDBY: This function is activated and ready to use. FACE TRACKING: This function is tracking. FACE ZOOM IN / OUT: This function is zooming on the face for tracking / zooming out when the tracking object leaves the surveillance area.
Sensitivity	Set the tracking sensitivity from HIGH / MEDIUM / LOW.
Resolution	Set the resolution for face tracking from Auto / VGA / QVGA.

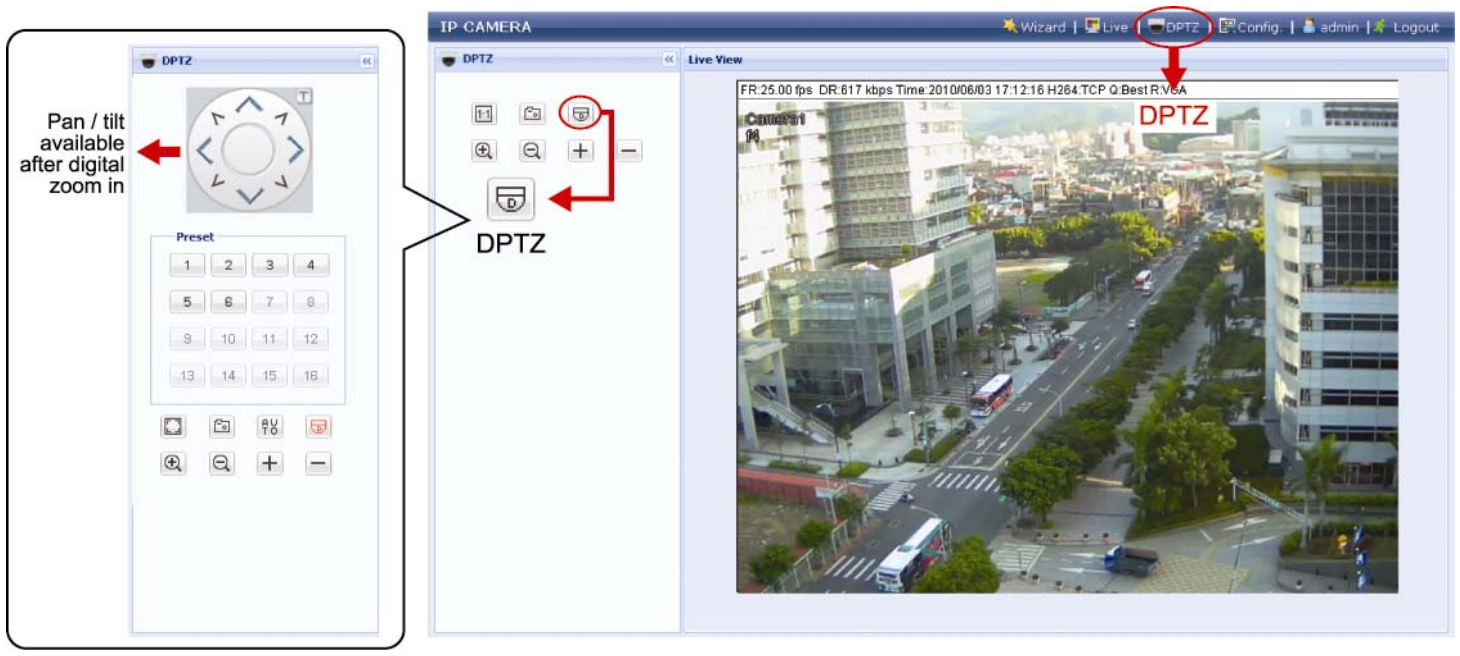
STEP3: When all the configurations are done, click “Save” to save your changes, and click “Live” on the top to return to the live view.

4.4 Digital PTZ (DPTZ) operations

This fixed network camera type has PTZ capability, i.e. digital PTZ (hereafter called “DPTZ”), for wide area monitoring.

Note: When this function is enabled, Face Tracking, Smart Zoom, and optical zoom are not allowed to use.

STEP1: Click “DPTZ” to show the DPTZ control panel.


Pan / tilt available after digital zoom in
DPTZ
Preset
IP CAMERA
Wizard | Live | DPTZ | Config. | admin | Logout
Live View
FR:25.00 fps DR:617 kbps Time:2010/06/03 17:12:16 H264:TCP Q:Best R:VGA
DPTZ

STEP2: Select the functions when needed:

ICON	FUNCTION	DESCRIPTION
/	Fit to screen / Restore to original size	There are several monitor resolutions available. When the selected resolution is out of your current live view support, a part of your surveillance area might get covered on the screen, and you need to manually move on the screen to check the covered part. : This is used to scale the selected resolution to fit in the current live view size. : This is used to restore the scaled live view resolution to its original size.
	Take snapshots	Click to take a snapshot of the current view, and save to the location specified in “Config.” → “Camera” → “Camera” → “Snapshot Path”.
	Enable Auto mode	Click to activate the auto mode of the camera. The auto mode could be “Sequence” or “Auto Pan” specified in “Config.” → “Camera” → “Cruise” → “Active Mode”. **Note:** This function is available only when DPTZ is enabled. Sequence: Move to several preset points accordingly and regularly specified in “Config.” → “Camera” → “Cruise” → “Active Mode” → “Sequence”. **Note:** Preset points are set in “Config.” → “Camera” → “Preset”. Auto Pan: Pan automatically and horizontally.
	Enable DPTZ	Click to activate the digital PTZ function. When this function is enabled, the following operations are available: ■ Auto mode ■ Move up / down / left / right after digital zoom-in.
/	Zoom in / out	Click to zoom in / out the image. ■ For AVN362, they’re available only when DPTZ is enabled. ■ For AVN363, they’re optical zoom-in / out; when “” is selected, they’ll switch to digital zoom-in / out.
/	Max. zoom in / out	Click to zoom in / out the image. ■ For AVN362, they’re available only when DPTZ is enabled. ■ For AVN363, they’re optical max. zoom-in / out; when “” is selected, they’ll switch to digital max. zoom-in / out.

4.5 System configuration menu

Click “Config.” to enter the configuration page.

Note: You need to be “Supervisor” or “Power User” to enter the system configuration page, and the functions available for these two user levels are different. If you’re not either of these two user levels, please re-log into the camera with one of them.

The functions are categorized into three menus: Network, Camera and General.

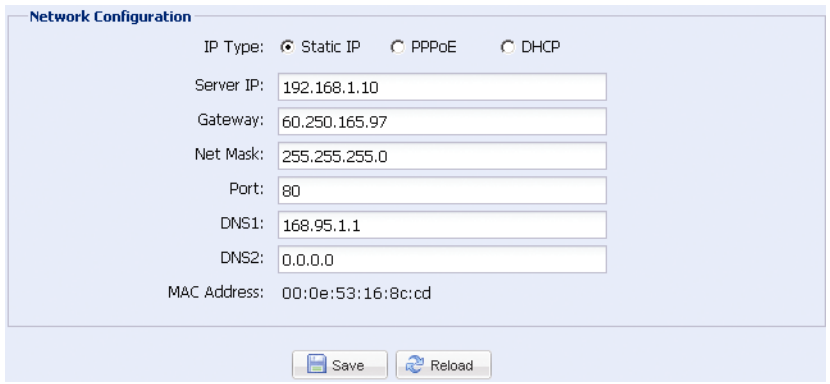
- For details about “Network”, please refer to “4.6 Network” at page 18.
- For details about “Camera”, please refer to “4.7 Camera” at page 21.
- For details about “General”, please refer to “4.8 General” at page 26.

Main Menu	Sub-Menu	Reference
Network	Network	Configure network settings.
	DDNS	Enter DDNS information when the network type is PPPOE or DHCP.
	SNTP	Synchronize your camera time with the networked computer systems.
	FTP	Enter the FTP information for event notifications when “FTP” is chosen in “General” → “Trigger”.
	Mail	Enter Email information for event notifications when “Email” is chosen in “General” → “Trigger”.
	SMS	Enter text messaging information for SMS notifications when “SMS” is chosen in “General” → “Trigger”.
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UpnP	Allow this camera to be detected among devices within the same network area for easy and quick usage.
Camera	Camera	1. Set the camera title. 2. Specify the snapshot path. 3. Select the streaming settings based on your network environment.
	Preset	Set the preset points for the DPTZ function.
	Cruise	Set the cruise mode when the auto mode is enabled: Sequence or Auto Pan.
	Color	Adjust the color performance.
	Time	Set daylight saving time and the current time.
	Smart Zoom or Digital Smart Zoom	*“Smart Zoom” is for AVN363; “Digital Smart Zoom” is for AVN362.* Set the sensitivity and standby interval.
	Calibration	*This function is available for AVN363 only.* Adjust the focus of each focal length.
	Face Tracking	Configure the parameters for face tracking.
General	General	1. Select the language of the web browser. 2. Check the MAC address of the camera.
	Server Log	*Available for Supervisor only.* Check the system event logs.
	Online	*Available for Supervisor only.* Check the current online user(s).
	Account	*Available for Supervisor only.* 1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Trigger	1. Enable / disable face and motion detection. 2. Set the motion detection area. 3. Select the event notification method.
	Upgrade	Check the current firmware version and upgrade.

4.6 Network

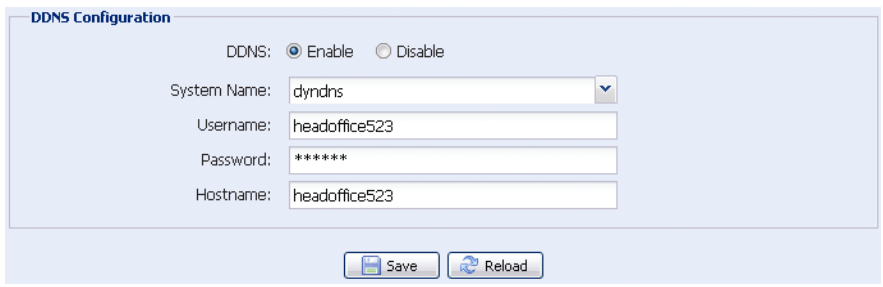
4.6.1 Network

You can set the network configuration of the network camera depending on your network type. For details, please refer to your installation guide.



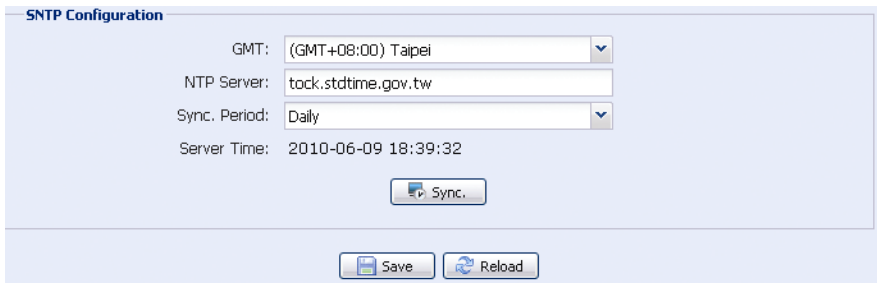
4.6.2 DDNS

Select “On” when the selected network type in “Network” is “PPPOE” or “DHCP”. For details, please refer to the installation guide.



4.6.3 SNTP

SNTP (Simple Network Time Protocol) is used to synchronize your camera time with the networked computer systems.



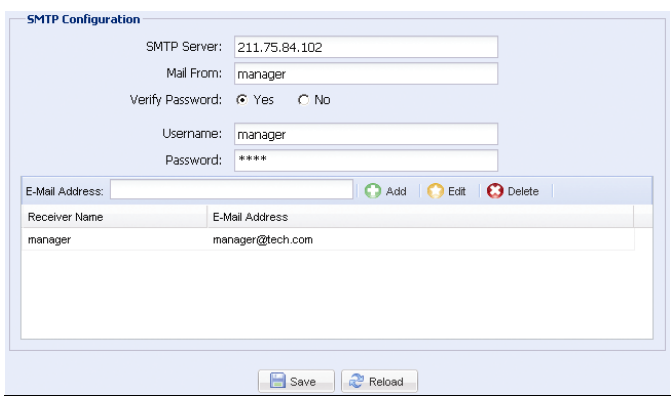
Function	Description
GMT	Once users choose the time zone, the network camera will adjust the local area time of the system automatically.
NTP Server	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync. Period	Select “Daily” to synchronize the camera time with the network time every day or “None” to turn off this function.
Server Time	Click and the network camera will synchronize the time with the network time.

4.6.4 FTP

Enter the detailed FTP information and click “Save” to confirm. The information you set here will be applied when “FTP” is selected in “General” → "Trigger".

4.6.5 MAIL

Enter the detailed e-mail information and click “Save” to confirm. The information you set here will be applied when “Email” is selected in “General” → "Trigger".

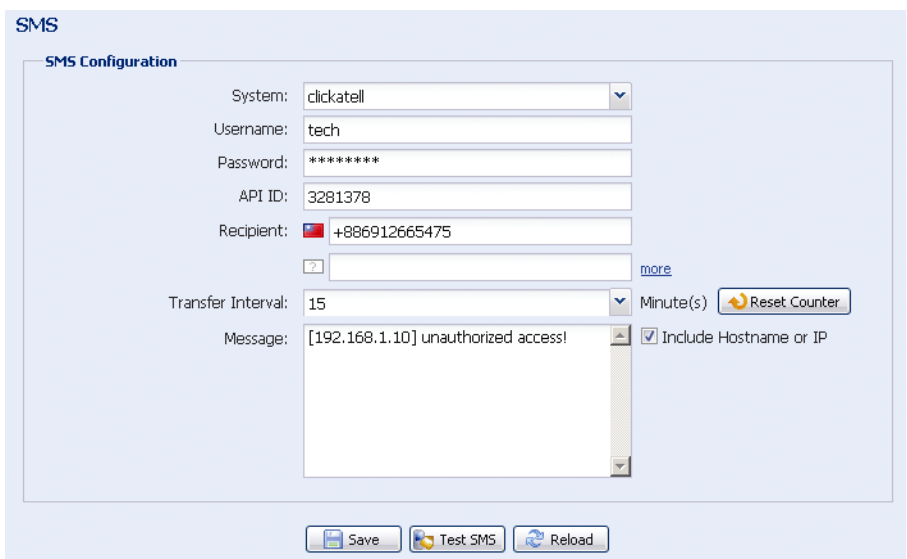


Function	Description
SMTP Server	Enter the SMTP server address provided from your e-mail system supplier.
Mail From	Enter the entire mail address to ensure e-mails will not be blocked by SMTP.
Verify Password	Some mail servers are required to verify the password. Please enter the “user name” and “password”.
E-Mail Address List	Add the e-mail address(s) of the assigned recipient(s).

4.6.6 SMS

Note: Before using this function, you need to apply an API ID from the mobile messaging company, Clickatell, and you will be charged starting from the 11th message. For details, please refer to “APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING’ at page 31.

Enter the detailed information needed for text messaging, and click “Save” to confirm. The information you set here will be applied when “SMS” is selected in “General” → "Trigger".

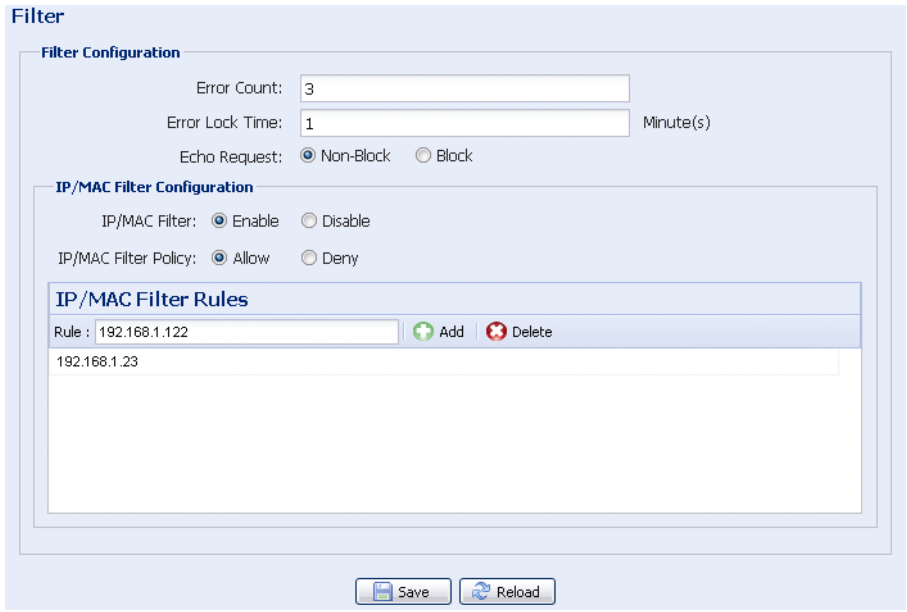


Function	Description
System	The text messaging service provider is Clickatell.
User name / Password	Enter the account user name and password you created in Clickatell.
API ID	Enter the API ID you applied from Clickatell.
Recipient	Click “Add” to enter the phone number, including the country code, to receive the text

Function	Description
	message. Five sets of phone numbers are allowed.
Transfer Interval	Set the interval time in minutes between two-message sending. The options are 0, 15, 30 & 60.
Reset Counter	Click to restart the text messaging, and the SMS will be sent after the specified time interval since you click this button.
Message	Enter the text content (up to 70 characters) you want to send with the text message.
Test SMS	To know whether your SMS setting is correct, click this button to immediately send a SMS to your phone. Note: This testing is not free and you will be charged for SMS sending base on your local rate.

4.6.8 Filter

Choose to permit or block the IP address(es) which can access this camera, and click “Save” to confirm.

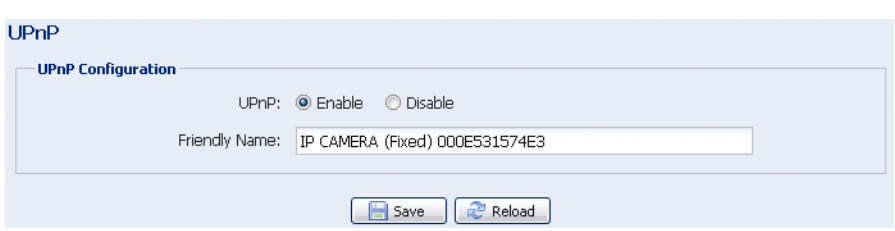


Function	Description
■ **Filter Configuration**	
Error Count	Set the maximum count for login failure. When the maximum count is reached, the IP address trying to access the network camera will be locked.
Error Lock Time	Set the lock time in minutes when the maximum count of error login for an IP address is reached.
Echo Request	Select “Non-Block” to allow other users to use the ping command to detect the IP address of your network camera, or “Block” to deny the ping command request.
■ **IP/MAC Filter Configuration**	
IP/MAC Filter	Choose to enable or disable the filter function.
IP/MAC Filter Policy	If “Enable” is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.
■ **IP/MAC Filter Rules**	
Rule	• To add an item to the IP address list, key in the IP address in “Rule”, and click “Add”. • To remove an existing item in the IP address list, click the item you want to remove, and click “Delete”.

4.6.9 UPnP

“UPnP” stands for “Universal Plug and Play”, which allows devices to connect seamlessly in the home and corporate environments and simplify installation of computer components.

Check “Enable” to allow the network camera to be detected among devices within the same network area, and set the identification name of the camera in “Friendly name”.

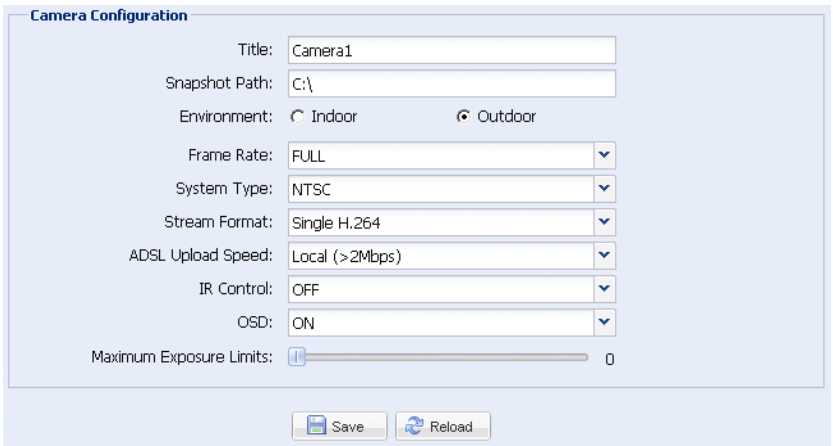


When this function is activated, the other PC within the same domain as this camera will be able to search this camera in “Network Neighbor” with the identification name set in “Friendly name”. Double-click it to quickly open the web browser for camera access.

4.7 Camera

4.7.1 Camera

Adjust the camera parameters if necessary.



Item	Description
Title	Enter the title for the camera with up to 15 alphabetic characters.
Snapshot Path	Specify the location to save the snapshot pictures.
Environment	Select the current environment for the camera to automatically adjust itself to produce the images suitable for the selected environment.
Frame Rate	The frame rate allowed to each viewer can be adjusted to adapt to the bandwidth on the network. Set the desired image frequency to the maximum (FULL) or to a specified frame rate (1/2; 1/3; 1/4; 1/5; 1/10; 1/15). The actual frame rate depends on the actual network connection, and may be lower than the specified one.
System Type	It shows the current system type: NTSC or PAL.
Stream Format	Select the streaming format to H.264 / MPEG-4 / Motion JPEG.
ADSL Upload Speed	Select your Internet upload speed, and the system will automatically adjust your data flow. The options are: Local (>2Mbps) / 2M (2000Kbps) / 1M (1000Kbps) / 640Kbps / 512 Kbps / 256Kbps / 128 Kbps / 64Kbps
IR Control	Select “AUTO” to automatically enable IR LEDs at night or in the dark environment, or “OFF” to disable this function.
OSD	Select “ON” to show the camera title on the live view, or “OFF” to hide the camera title.
Maximum Exposure Limits	This function is used to extend the exposure time for clearer images when the light is not sufficient. Select 1 ~ 5 to extend the exposure time based on your current light condition. The larger the value, the longer the exposure time, and the less the fps. 0 means function off.

4.7.2 Preset

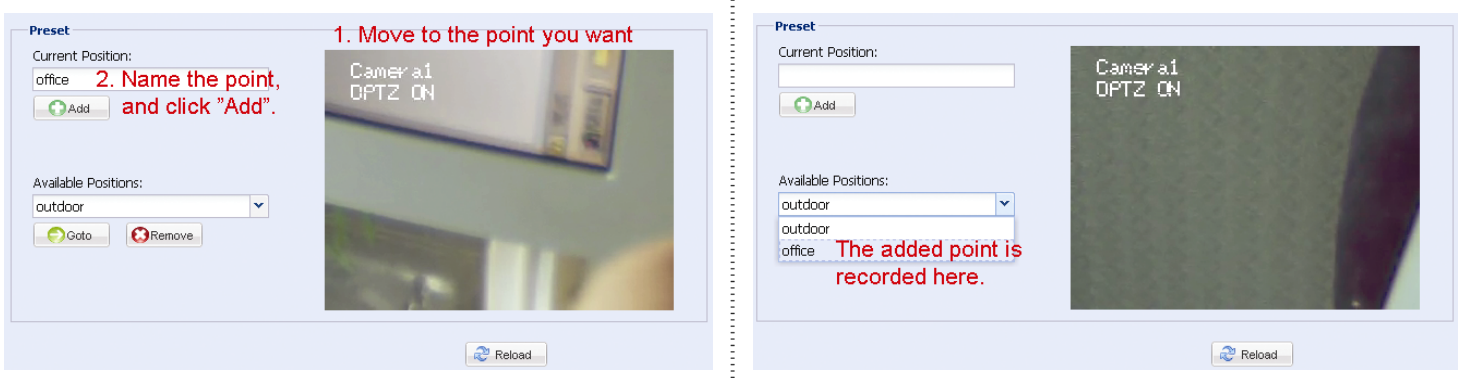
Note: Before using this function, make sure the DPTZ function is enabled.

You can set new preset points (up to 16) or check existing points here.

How to set a new preset point

Step1: Click to move to the point you want on the live view panel on the right side.

Step2: In “Current Position”, give a name to this point, and click “Add”.



How to check an existing preset point

In “Available Positions”, select the name of the point you want to check from the drop-down list, and click “Goto”.

You will see the camera view on the right side moving to the point it’s recorded.

How to delete an existing preset point

In “Available Positions”, select the name of the point you want to check from the drop-down list, and click “Remove”.

4.7.3 Cruise

Note: Before using this function, make sure you have finished setting several preset points.

Here defines how the auto mode of the camera is going to work when AUTO is selected: Sequence or Auto Pan.

Auto Pan

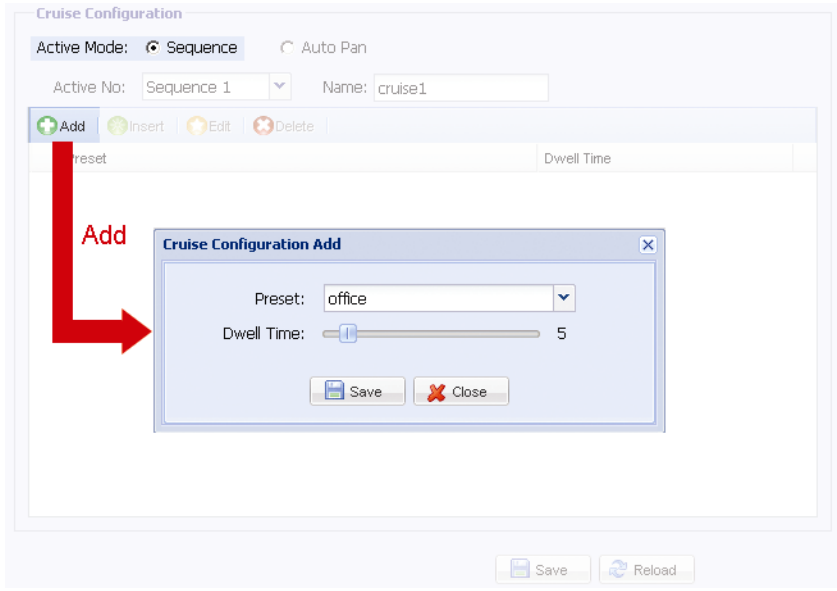
When “Auto Pan” is selected here and AUTO is clicked on the live view page, the camera will start panning.

Sequence

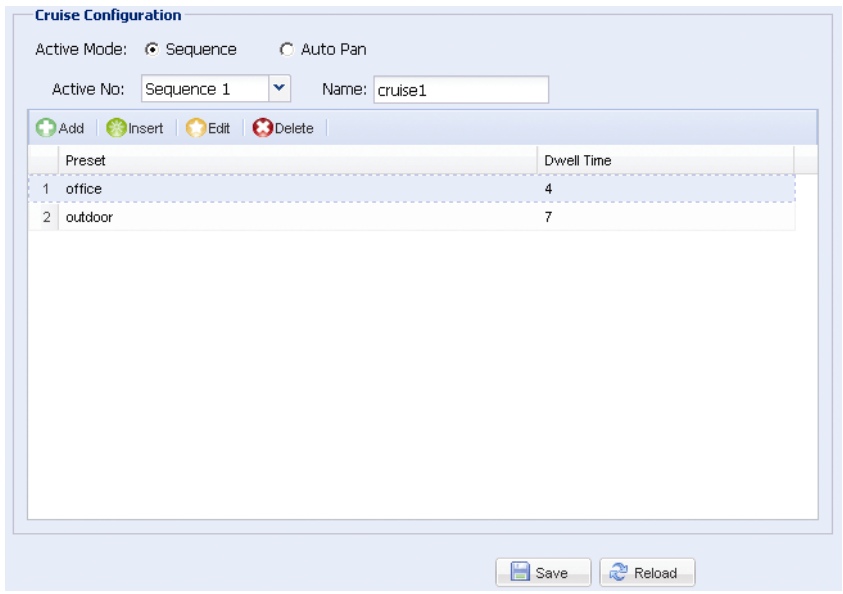
When “Sequence” is selected here and AUTO is clicked on the live view page, the camera will start patrolling each preset point defined in “Sequence”.

Step1: Click “Add” to choose a preset point from the drop-down list, and select the duration to stay at this point from 1 ~ 60 minutes.

Then, click “Save” to confirm.



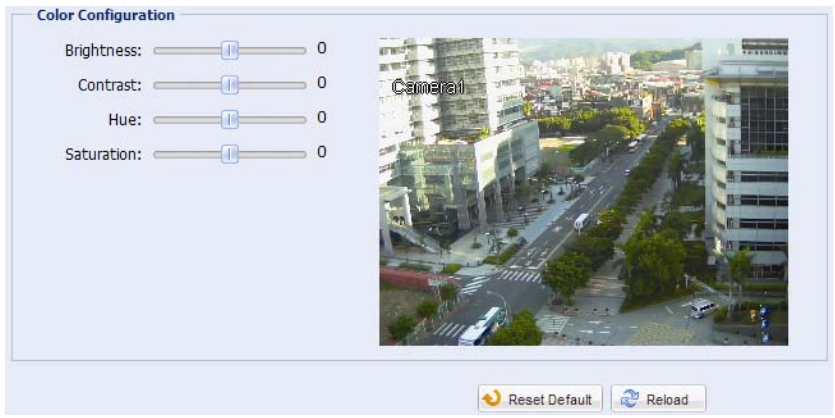
Step2: Click “Add” again to add more preset points. When all the points are added, click “Save” to confirm.



4.7.4 Color

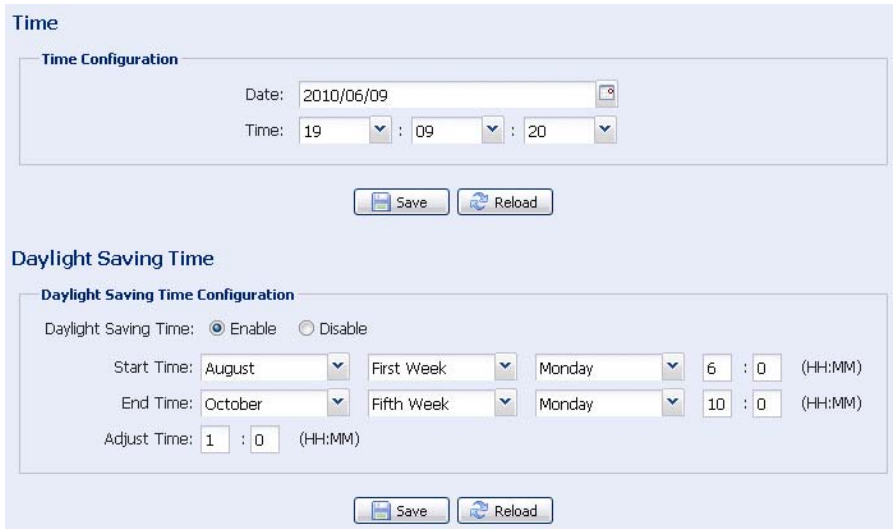
Adjust the color performance from Brightness, Contract, Hue and Saturation. Click and drag the slider to preview the color change on the right side of ths page and adjust the image color.

To restore the default values, click “Back to Default”.



4.7.5 Time

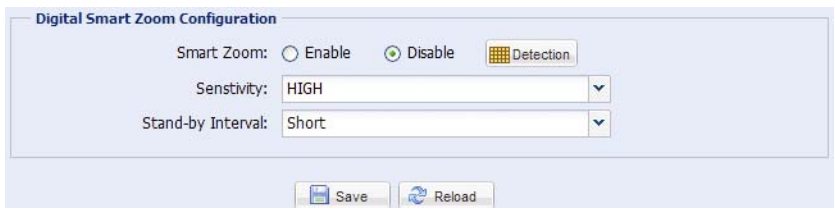
Set daylight saving time and the current time, and click “Save” to confirm.



Function	Description
■ **Time Configuration**	
Date	Set the current date.
Time	Set the current time.
■ **Daylight Saving Time Configuration**	
Daylight Saving Time	Specify whether to use daylight saving time (Enable / Disable).
	If this function is enabled, set the time period (Start Time / End Time), and adjust the daylight saving time in hours (Adjust Time).

4.7.6 Smart Zoom / Digital Smart Zoom

Note: "Smart Zoom" is available for AVN363; "Digital Smart Zoom is available for AVN362.



Column	Description
Smart Zoom	To switch this function on or off, select "Enable" or "Disable". Or, it's also available to click to enable / disable this function on the live view panel.
Detection*	Select to set a specific detection area for this function.
Sensitivity	Select the digital smart zoom sensitivity (HIGH / MEDIUM / LOW)
Stand-by Interval	Select the stand-by interval (Short / Normal / Long).

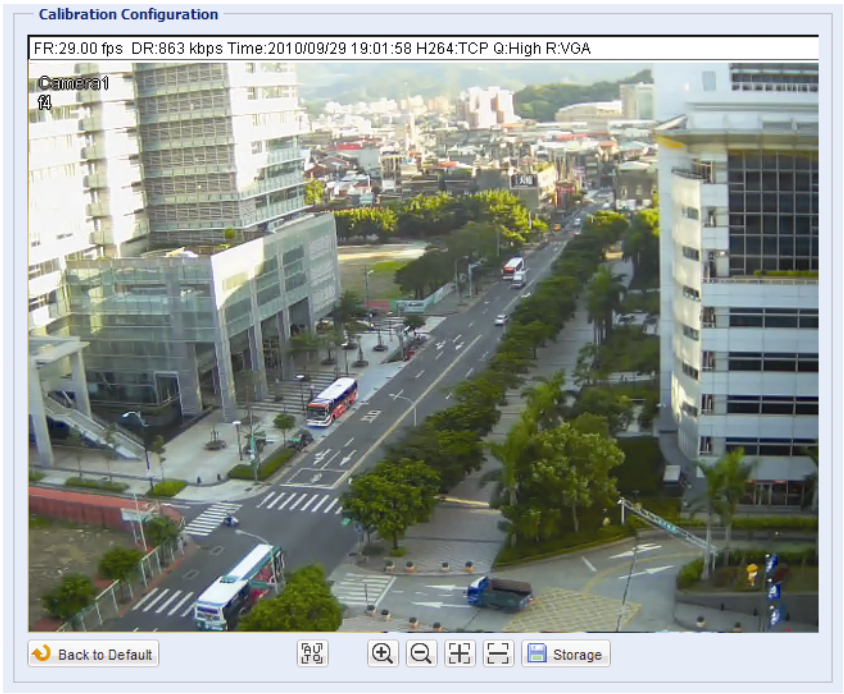
**Aavailable for AVN362 only.*

4.7.7 Calibration

Note: This function is available for AVN363 only.

Go to this page to adjust the focus in each focal length.

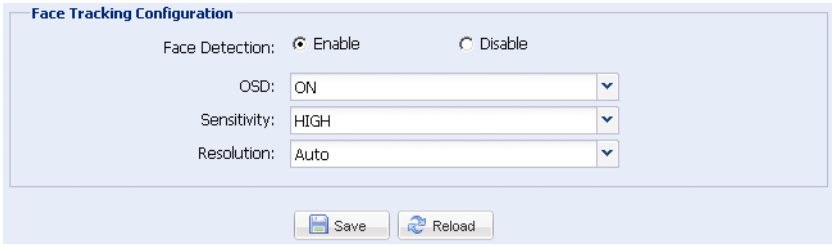
When you finish the calibration, select "Storage" to save, or "Back to Default" to discard.



Icon	Function	Description
	Auto Calibration	Click to start calibrating the focus in each zoom ratio.
Manual Calibration		
/	Zoom in / out	Click / to select the focal length you want to adjust.
/	Focus in / out	Click / to adjust the focus for the selected focal length.

4.7.8 Face Tracking

Configure the parameters for face detection.

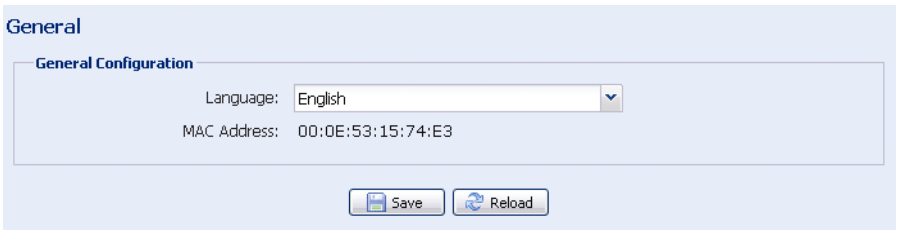


Function	Description
Face Detection	Select “Enable” to activate or “Disable” to deactivate this function.
OSD	Select “ON” to display the following status messages on the live view: FACE STANDBY: This function is activated and ready to use. FACE TRACKING: This function is tracking. FACE ZOOM IN / OUT: This function is zooming on the face for tracking / zooming out when the tracking object leaves the surveillance area.
Sensitivity	Set the tracking sensitivity from HIGH / MEDIUM / LOW.
Resolution	Set the resolution for face tracking from Auto / VGA / QVGA.

4.8 General

4.8.1 General

In “General”, you can select the UI language to English or Chinese, and check the MAC address of your camera.

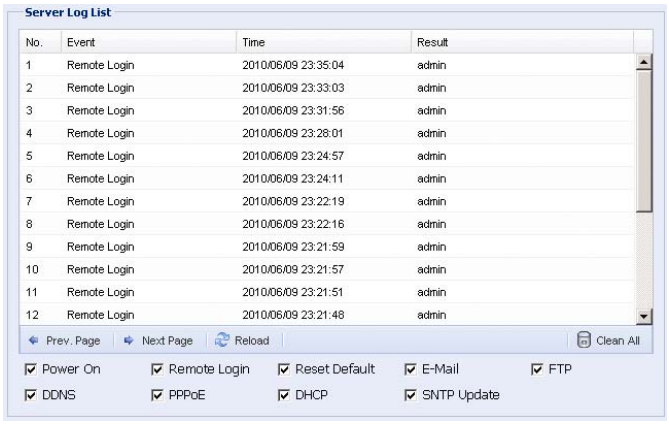


4.8.2 Server Log

Note: This function is available only for “Supervisor”.

To quickly search the system logs you want by event type, click “Prev. Page” or “Next Page” to find the logs you want, or check the event type(s) and click “Reload” to start searching.

To clear all system event logs, click “Clear All”.

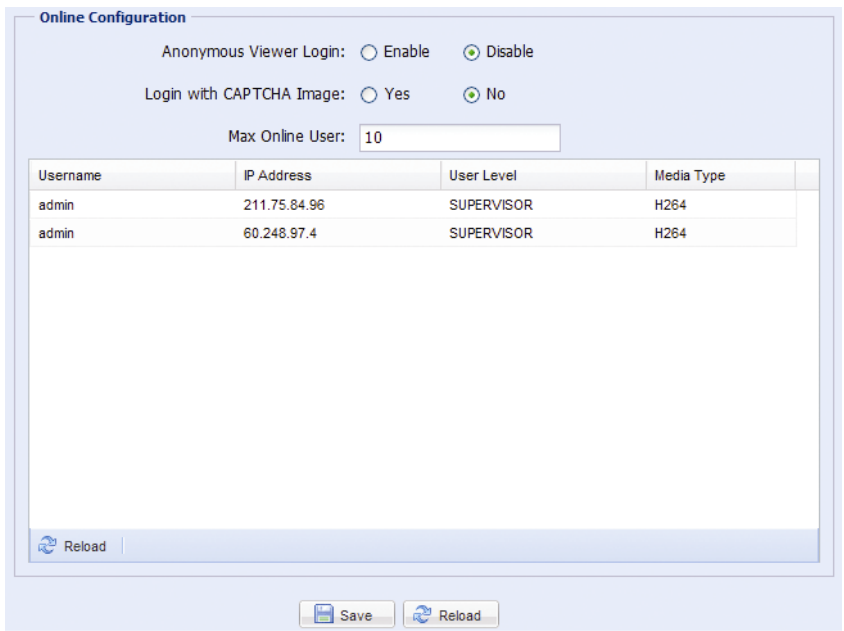


4.8.3 Online

Note: This function is available only for "Supervisor".

You can check the current online user(s) with respective online information. To refresh the list, click "Reload".

- To allow anonymous login, select "Enable" in "Anonymous Viewer Login".
- To disable image code verification at login, select "No" in "Login with CAPTCHA Image".



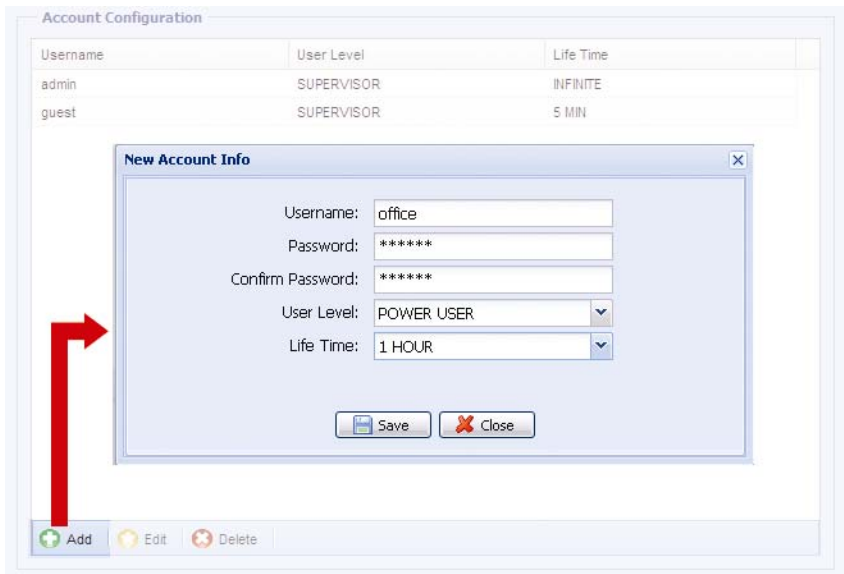
4.8.4 Account

Note: This function is available only for "Supervisor".

You can create a new account with different user access privilege, or delete or modify an existing account setting.

How to create a new account

Step1: Click "New", and fill in the following columns.



Column	Description
User Name	Set a user name that will be used for camera access. The user name allows up to 16 alphanumeric characters.
Password	Set the password that will be used for remote login. The password allows up to 16 alphanumeric characters.
Confirm Password	Enter the password again to confirm.
User Level	Set the security level of an account to give the permission to control different functions. There are four user levels: SUPERVISOR, POWER USER, NORMAL USER and GUEST.

Column	Description
Life Time	Select how long this account is allowed to stay online (1 MIN / 5 MIN / 10 MIN / 1 HOUR / 1 DAY / INFINITE)

Step2: Then, click “Save” to save your setting and create a new account.

How to modify or delete an existing account

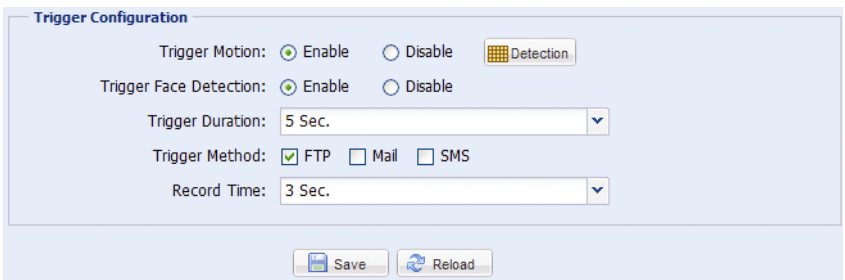
Step1: Select the account you want to modify or delete.

Step2: To modify the account, click “Edit” to change the settings, and click “Save”.
To remove the account, click “Delete”.

Note: It’s not allowed to remove an account when there’s only one account in the account list.

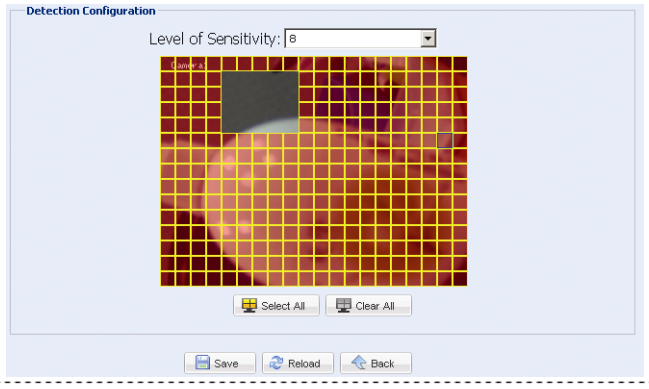
4.8.5 Trigger

You can set the motion or alarm detection and select the notification function.



◆ Trigger Setting

In this section, you can select to enable or disable motion & face detection.

Item	Description
Motion	Select to enable or disable the motion detection function.
	• **Motion Detection Area Setting** When “Enable” is selected, click “Detection” to enter the motion detection area setting page as follows:  **Level of Sensitivity:** Set the detection sensitivity from 0 ~ 9. **Area Setting:** Set the motion detection area by selecting the area grids with your mouse. Pink grids represent the area that is not being detected while the transparent grids are the area under detection. You can set multiple areas under detection. Click “Clear All” to set the whole area undetected. Click “Select All” to set the whole area under detection.
Trigger Duration	Set the duration time for trigger recording (5 / 10 / 20 / 40 seconds).

◆ Notification Setting

In this section, you can select to enable e-mail and/or FTP notification when an alarm or a motion happened.

Item	Description
Method	• **Email** When this option is checked, the network camera will upload the captured video clip to the assigned e-mail address(s) once motion or alarm recording happened. • **FTP** When this option is checked, the network camera will upload the captured video clip to the specified FTP site once motion or alarm recording happened. • **SMS** When this option is checked, the network camera will send a text message to the specified mobile phone number once a motion or face detection event occurs. For details, please refer to "4.6.6 SMS" at page 19.
Trigger Duration	Set the duration when a motion or face detection event occurs (5 / 10 / 20 / 40 seconds).
Record Time	Set the record time of the notification video clip (1 ~ 5 seconds).

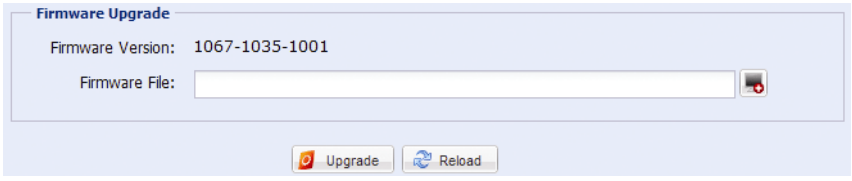
4.8.8 Upgrade

This function is used when users need to upgrade the network camera for function scalability.

Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Note: For system upgrade from a web browser, it only supports upgrading one file at a time. To upgrade all files, you need to start from Step1 again when one file is upgraded.
If you want to upgrade all files at a time, please use our supplied CMS software, Video Viewer. For details, please refer to "3.4.3 Firmware upgrade" at 8.

Step1: Click " " to browse to where you save the upgrade files, and select one of them.



Step2: Click "Upgrade" to start system upgrading.

Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

APPENDIX 1 PRODUCT SPECIFICATIONS

	AVN363	AVN362
■ Network		
Network Compression	H.264 / MPEG4 / MJPEG	
LAN Port	YES	
LAN Speed	10/100 Based-T Ethernet	
Supported Protocols	DDNS, PPPoE, DHCP, NTP, SNTP, TCP/IP, ICMP, SMTP, FTP, HTTP, RTP, RTSP	
Video Resolution	SXGA,SXVGA,720P, VGA,QVGA	
Frame Rate	NTSC:30, PAL:25	
Number of Online Users	10	
Security	Multiple user access levels with password	
Web management	(1) Web browsers, such as Internet Explorer, Mozilla Firefox, Google Chrome, & Safari for single device access, or (2) Free CMS software, Video Viewer, for up to 16 network cameras control simultaneously	
■ Camera		
Image Sensor	1/3” MOS-Type Image Sensor	
Pixels	1280 (H) x 1024 (V)	
Min Illumination	0 Lux (11m IR ON) / 0.3 Lux (IR OFF)	0 Lux (11m IR ON) / 0.2 Lux (IR OFF)
Shutter Speed	At 60 fps: 1/60s to 1/60000s	
S/N Ratio	More than 48dB (AGC off)	
Lens	f4.0mm ~ f9.0mm	f6.0mm
F-number	F2.0(f=4mm) / F2.6(f=9mm)	F1.8
Viewing Angle	75°~36°	62°
IR LED	56 units	
IR Effective Range	15 meters (30 IPS) / 30 meters (15 IPS)	Up to 25 meters
IR Shift	YES	
White Balance	ATW	
IP Rating	IP67	
Power Source (±10%)	AC100V ~ 240V	DC12V / 1.5A
Power Consumption (±10%)	10W ~ 15W	--
Current Consumption (±10%)	--	1000 mA
Operating Temperature	-20℃~40℃	
■ Others		
Mobile Surveillance	iPhone, BlackBerry, Window Mobile, Symbian & Android	
Motion Detection	YES	
Smart Light Control	YES	
Digital Smart Zoom	YES	
Digital Pan / Tilt / Zoom	YES	
Face Detection	YES	
Event Notification	FTP and Email	
Minimum Web Browsing Requirements	• Pentium 4 CPU 1.3 GHz or higher, or equivalent AMD • 256 MB RAM • AGP graphics card, Direct Draw, 32MB RAM • Windows 7, Vista & XP, DirectX 9.0 or later • Internet Explorer 7.x or later	

** The specifications are subject to change without notice.

** Dimensional tolerance: ± 5mm

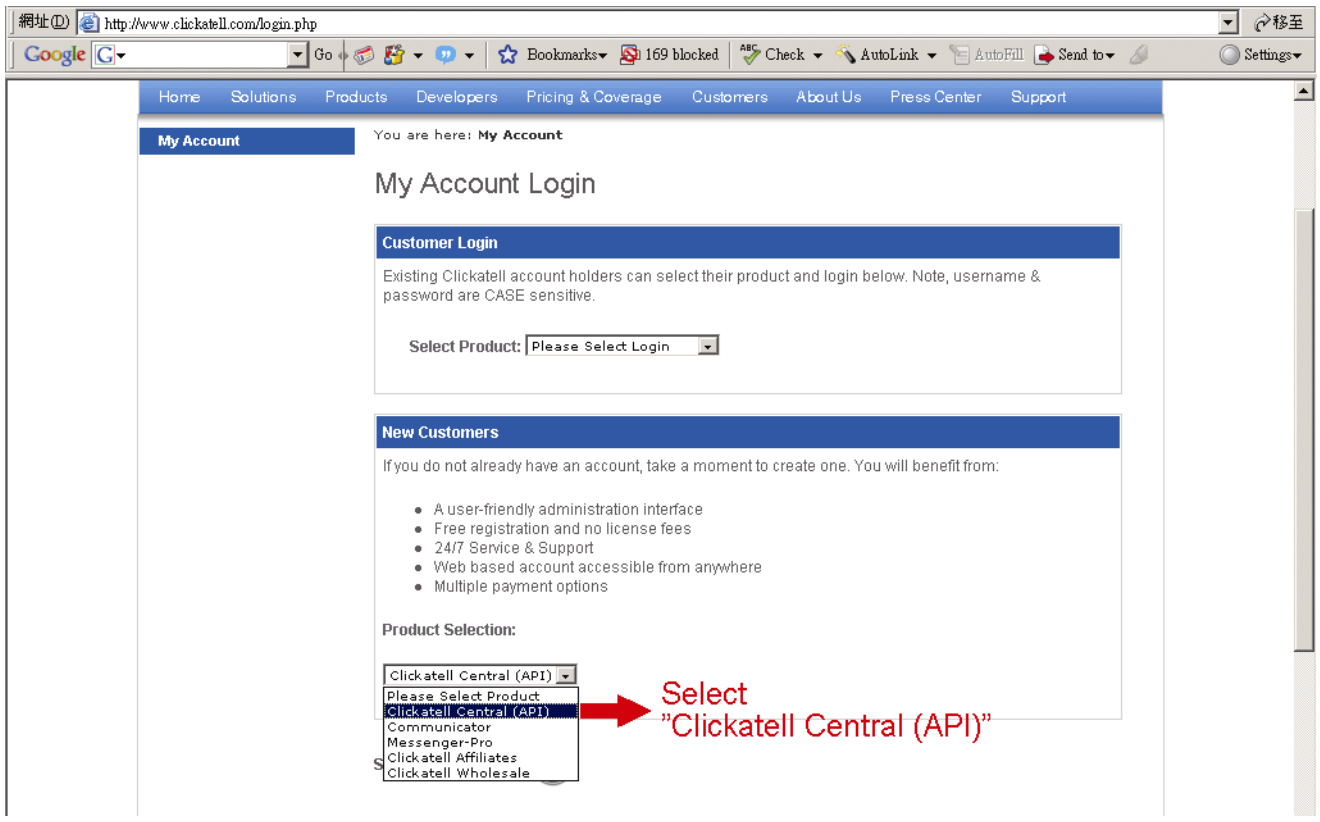
APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING

To allow the camera automatically sending a text message when an event happens, you need to apply an API ID from Clickatell, one mobile messaging company, first.

Note: The SMS messaging is not totally free. You will be charged starting from the 11th message.

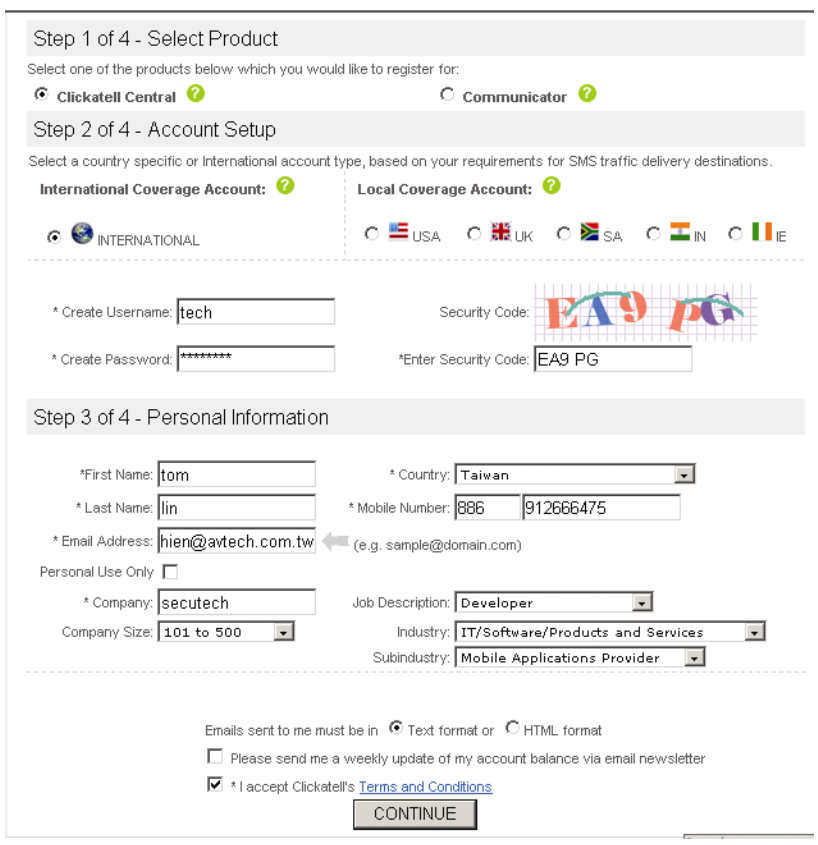
Please follow the steps below for application.

Step1: Go to http://www.clickatell.com/login.php. In “New Customers”, select “Clickatell Central (API)” from the drop-down list.



Step2: Fill in your information to create an account, and click “CONTINUE”.

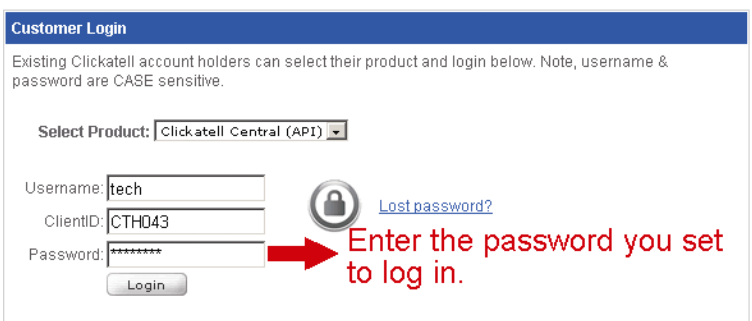
Note: Note down the user name and password, and the mobile phone number you specified here for SMS notification setting later.


Step 1 of 4 - Select Product
Select one of the products below which you would like to register for:
Clickatell Central
Communicator
Step 2 of 4 - Account Setup
Select a country specific or International account type, based on your requirements for SMS traffic delivery destinations.
International Coverage Account:
Local Coverage Account:
INTERNATIONAL
USA
UK
SA
IN
IE
* Create Username: tech
Security Code:
* Create Password: ********
*Enter Security Code: EA9 PG
Step 3 of 4 - Personal Information
*First Name: tom
* Country: Taiwan
* Last Name: lin
* Mobile Number: 886 912666475
* Email Address: hien@avtech.com.tw
(e.g. sample@domain.com)
Personal Use Only
* Company: secutech
Job Description: Developer
Company Size: 101 to 500
Industry: IT/Software/Products and Services
Subindustry: Mobile Applications Provider
Emails sent to me must be in Text format or HTML format
Please send me a weekly update of my account balance via email newsletter
* I accept Clickatell's Terms and Conditions
CONTINUE

Step2: When the account is created, the system will automatically send an Email to your specified Email address and ask you to activate your account.

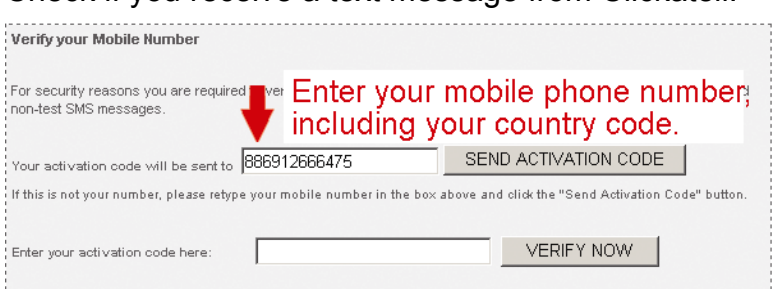
Click the link in the Email to complete account activation, and enter the login page as follows. Enter the password you set, and click “Login”.

My Account Login


Customer Login
Existing Clickatell account holders can select their product and login below. Note, username & password are CASE sensitive.
Select Product: Clickatell Central (API)
Username: tech
ClientID: CTH043
Password: ********
Login
Lost password?
Enter the password you set to log in.

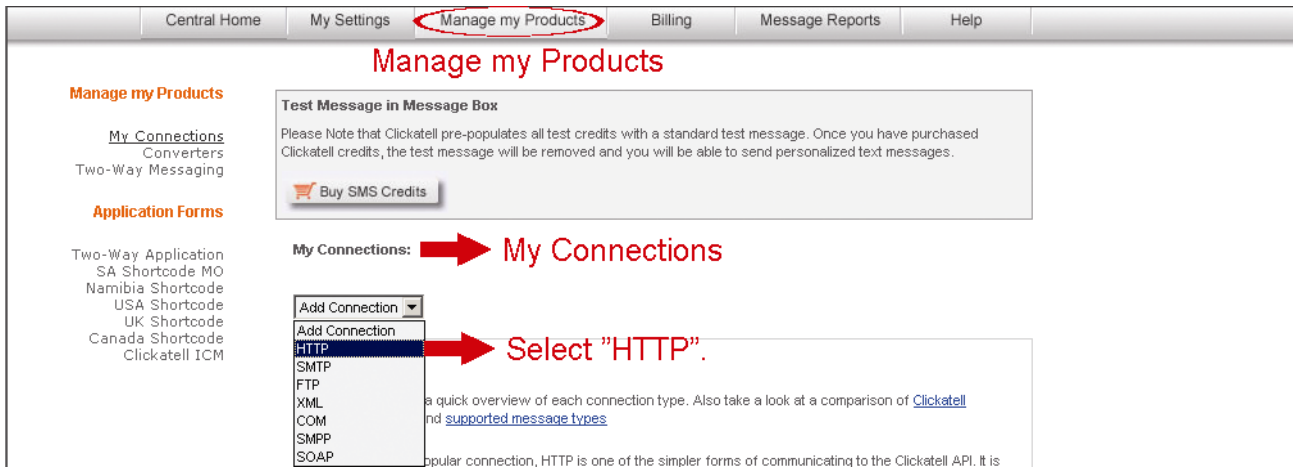
Step3: Enter the mobile phone number (including your country code) you want the text message to be sent, and click “SEND ACTIVATION CODE”. The system will send an activation code to that number for verification.

Check if you receive a text message from Clickatell.

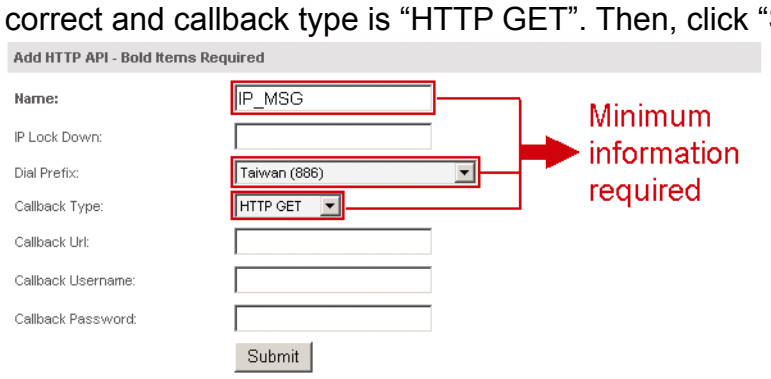

Verify your Mobile Number
For security reasons you are required ver
non-test SMS messages.
Enter your mobile phone number, including your country code.
Your activation code will be sent to 886912666475
SEND ACTIVATION CODE
If this is not your number, please retype your mobile number in the box above and click the "Send Activation Code" button.
Enter your activation code here:
VERIFY NOW

Step4: Go back to Clickatell, and click the tab “Manage my Products”.

Then, select “HTTP” from the drop-down list “My Connections”.



Step5: In “Add HTTP API”, enter a descriptive name for this service, and make sure the dial prefix is correct and callback type is “HTTP GET”. Then, click “Submit”.



Step5: You will get an API ID as follows.

Note: Note down the API ID for SMS notification setting later.